MANAGEMENT METHODS



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Why take 8 steps when four do it better?

You can reduce file operating costs at least 25% by installing SUPER-FILER

• Eliminate lost motion and you make work easier. Not only that, but you speed it up. You get more work done. And that reduces cost.

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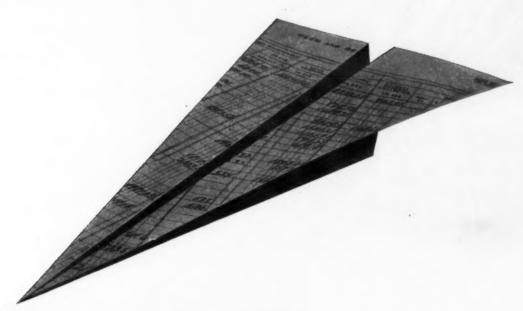
Super-Filer, the Mechanized File, reduces over-all filing costs at least 25%.

There's one sure way to prove the savings Super-Filer makes possible for you. See it demonstrated and then try it out in your own office. You'll find Super-Filer on the floor of your local GF showroom. The address is shown in your phone book. Just call the GF dealer or branch—or write The General Fire-proofing Company, Department M-61, Youngstown 1, Ohio.

MODE-MAKER DESKS • GOODFORM ALUMINUM CHAIRS
SUPER-FILER MECHANIZED FILING EQUIPMENT • GF ADJUSTABLE STEEL SHELVING

GF metal business furniture is a GOOD investment
(Circle 119 for more information)





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Streamlined!

How long has it been since you streamlined your office procedures? If you have followed the same paperwork routine for any length of time, perhaps conditions have changed so that several forms can now be combined into one multiple part set . . . copies eliminated from other forms . . . or maybe No Carbon Required Paper is the answer to some specific problem.

Reynolds and Reynolds representatives have shown thousands of businesses, large and small, how properly designed forms can streamline office procedures, cut costs and increase profits.

Why not ask a Reynolds and Reynolds representative to go over your paperwork procedures with you . . . no obligation, of course!



The Reynolds & Reynolds Company

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DECEMBER 1956



Wood Paneling says "Welcome" at General Dynamics

Nothing seems warmer, friendlier and more inviting than walls of wood. So practical, too. For, once they're installed, you never have to paint, paper or decorate again. Just an occasional waxing—and wood paneling will stay young and beautiful.

In Weldwood Paneling, you can select from the industry's widest range of woods: from imports like butternut and East Indian Rosewood to familiar species like oak and cherry. (Above, General Dynamics picked walnut for the reception room; interior planning by Ethel Pilson Warren and J. W. Rogers, Jr.) Find out the full paneling story by sending for "Weldwood Hardwood Paneling for Business and Institutional Interiors."

Weldwood® WOOD PANELING



UNITED STATES PLYWOOD CORPORATION, Dept. MM12-56, 55 W. 44th St., N. Y. 36, N. Y. (Circle 149 for more information)

MANAGEMENT METHODS DECEMBER 1956 · VOLUME 11 No. 3

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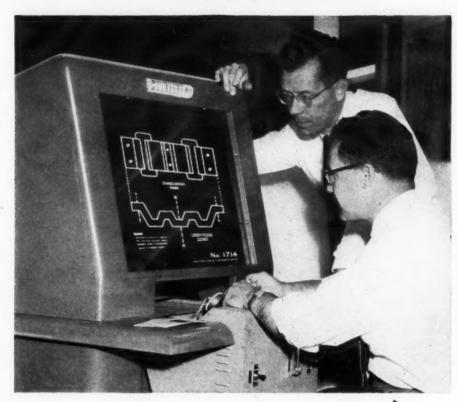
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DECEMBER 1956

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ONE DRAWING IN THOUSANDS-



located in seconds -with FILMSORT!

A LARGE Eastern designer and manufacturer of machine tools is saving space, time and personnel through



unitizing its file of 400,000 drawings in Filmsort Aperture cards. These

drawings, indexed for frequent reference in 3 x 5 cards, are simply filed and easily accessible. The rapidly expanding company adds to its drawing file at the rate of 30,000 annually . . . yet to date, one clerk using the Filmsort system handles all filing, referrals and enlargement prints in connection with the drawing file.

The adaptation of Filmsort to the

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FILMSORT DIVISION

DEXTER FOLDER COMPANY
A Division of Miehle Printing Press and Mfg. Co.
Pearl River, New York

(Circle 117 for more information)

MANAGEMENT METHODS

22 West Putnam Ave., Greenwich, Conn

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Policy re manuscripts: The object of MANAGE-MENT METHODS is to offer practical solutions to administrative problems. For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists, as well as from active businessmen, at all levels of management.

We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.



"Sure we'can give you 60-day delivery!" said the boss. "Let's have the details. We'll send out for lunch." He doesn't know it yet, but those hamburgers will cost him *plenty*.

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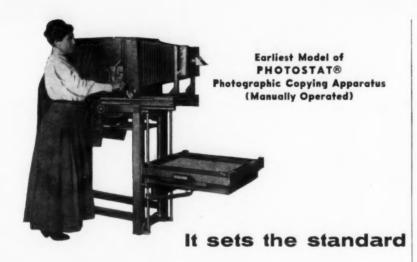
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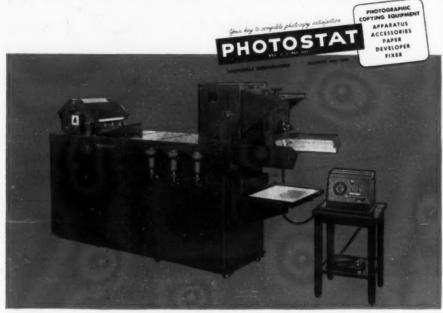


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by which ALL others are judged!



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Over the years, by the hundreds, and then by the thousands PHOTOSTAT products have spread throughout the world. New and improved models of apparatus have constantly been added, until today they serve commerce, industry and government with the best that can be had in modern photographic copying equipment. This type of

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This is the outstanding reason why you should always be sure to look for the PHOTOSTAT symbol and insist upon it, before you purchase any photographic copying equipment.

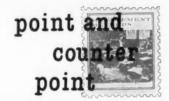
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(Circle 135 for more information)



LETTERS TO THE EDITOR

Reader service card

SIR: The reader's inquiry card is an excellent device for the convenience of the readers of your Management Methods. However, we are faced with a shortage of them, due to the fact that we circulate your periodical to several officers. . . . It is readily foreseeable that the first reader will detach and use the card, thus depriving subsequent readers of this service.

The use of the reader's service card indicates its effectiveness. We therefore suggest that the publisher consider including more than one reader service card. . . .

BERNARD L. FOY TENNESSEE VALLEY AUTHORITY KNOXVILLE, TENN-

■ The above letter is representative of a number of similar letters received by Management Methods over a period of time. It is indicative of the fact that many copies of each issue are read not only by the recipient, but by his associates as well. MM now bows to the opinion of its public. In the back of this issue we have bound two reader service cards, to fill the apparent need.

EDITOR

Keyman insurance

SIR: I have read your article on the new Office Contents Insurance—The New All Risk Property Coverage for Business in your November issue. The article . . . provides the answer for a new and growing need in business. . . .

I, however, am a life insurance man. While I am interested in all forms of insurance coverage, I make my brief for life insurance. In that case, I'd like to submit an issue for your readers to consider along with this so-called All Risk Coverage.

In today's picture, management is more and more coming to recognize the value of its human resources in the broader horizons of continued profitable operations. The chairman of the board of one of the country's leading companies has said, "The success or failure of a business enterprise is more dependent on management than any other factor—and the crux of successful management is keymen."

These keymen are the individuals

A flip of the switch...a press of the button...

LOOK, NO HANDS



Auto-typist eliminates routine typing and dictation...by automation

Auto-typist brings you office automation! It's the fastest, most accurate way to handle all repetitive correspondence . . . and it's true that well over half of general office correspondence is routine, or follows a standard form. Sales letters, order acknowledgments, answers to inquiries, collection letters, just to name a few, can be handled efficiently and economically by Auto-typist. Any one of your girls can turn out 125 letters a day with an Auto-typist—3 to 4 times normal manual typing output. Any standard office typewriter can be converted into an automatic typing machine—and one

average typist can operate as many as four Auto-typists.

How Auto-typist works . . . Carefully prepared letters or paragraphs are perforated on a paper roll which operates the typewriter keys . . . similar to a player-piano roll. Twenty or thirty complete letters can be included, or a series of paragraphs which can be combined to make up many letters.

Salutations are manually typed, then, by merely pushing the numbered button or buttons that correspond to the letter or paragraphs desired, Auto-typist automatically picks out the letter, or assembles the paragraphs in proper order, and types it perfectly! Manual insertions can also be made at any point desired.

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MANUFACTURERS OF AUTO TYPIST, COPY TYPIST AND CABLE TYPIST

(Circle 171 for more information)

DECEMBER 1956

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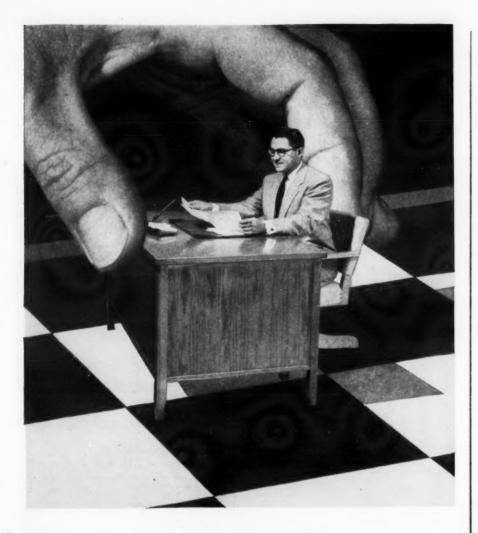
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MOVING TIP FOR BUSY EXECUTIVES:

Mayflower's Expert Attention Helps Keep Your Men On The Job

• Moving long-distance without their husbands on hand to supervise could be a great ordeal to many wives. But when you employ Mayflower to handle their moves, you can assure them that Mayflower will take over the full responsibility. That's because Mayflower men are so well trained, so thoroughly experienced, and so completely equipped. Nothing is left to chance. That's why you can send your men on ahead to their new jobs without delay, and without causing family hardship. So, call your local Mayflower agent whenever you have personnel to move!

AERO MAYFLOWER TRANSIT COMPANY, INC. . INDIANAPOLIS



America's finest long-distance moving service (Circle 103 for more information)

who have the ability, the fire, and drive to push the company along on a money-making basis. If there is money for the pay envelopes on pay day, you can think of keymen. As you think of all the other things that mean profits in business, you think of the keymen. And now let us look at the keyman picture in your suggested All Risk Coverage for business property. Let us tie up this keyman as a piece of income producing property for the business. In this connection, one of our leading business survey organizations, looking in at 667 firms as interviewees, for the purpose of learning the various types of insurance they carry, found the following:

1. 645-Fire Insurance

2. 617-Workman's Compensation

3. 547-Job Liab:lity

4. 358-Burglary

5. 298-Wind, Tornado, Flood

6. 87 -Keyman Insurance

Only 22 were without fire insurance, only 87 had keyman insurance. Yet the hazard of loss of keyman services, and resultant loss to profitable operations through keyman departure or keyman disability makes insignificant the loss experience from the other hazards mentioned.

In today's picture, keyman insurance provides not only a safeguard of business through indemnity and collateral, but it forms a growing basis for the provision of future benefits to keymen—in the areas of retirement and deferred pay, and in the opportunity it provides for covering management and men alike in event of disability—which experience indicates is a greater hazard than death.

I know I have strayed from the article which prompted my comments but I think it a must for a businessman to consider all the areas of all the risks which mean profitable operations. And, the keyman is a risk which must be recognized in the growing picture in today's economic picture.

PAUL BROWER
DIRECTOR OF ADVANCED UNDERWRITING
MUTUAL OF NEW YORK

we neglected to credit J. Gordon Carr, Architect, and Gerstell Associates, Inc., whose conference area designs were described and illustrated. The issue contains a five-page portfolio dealing with two diverse examples of conference area design. Both examples were recipients of 1956 "Best Place to Work" awards. J. Gordon Carr designed the "Stockholders Meeting Room" of The Texas Co., on pages 78 and 79; Gerstell Associates, Inc. designed the conference area of Uris Brothers, on pages 80 and 81. m/m

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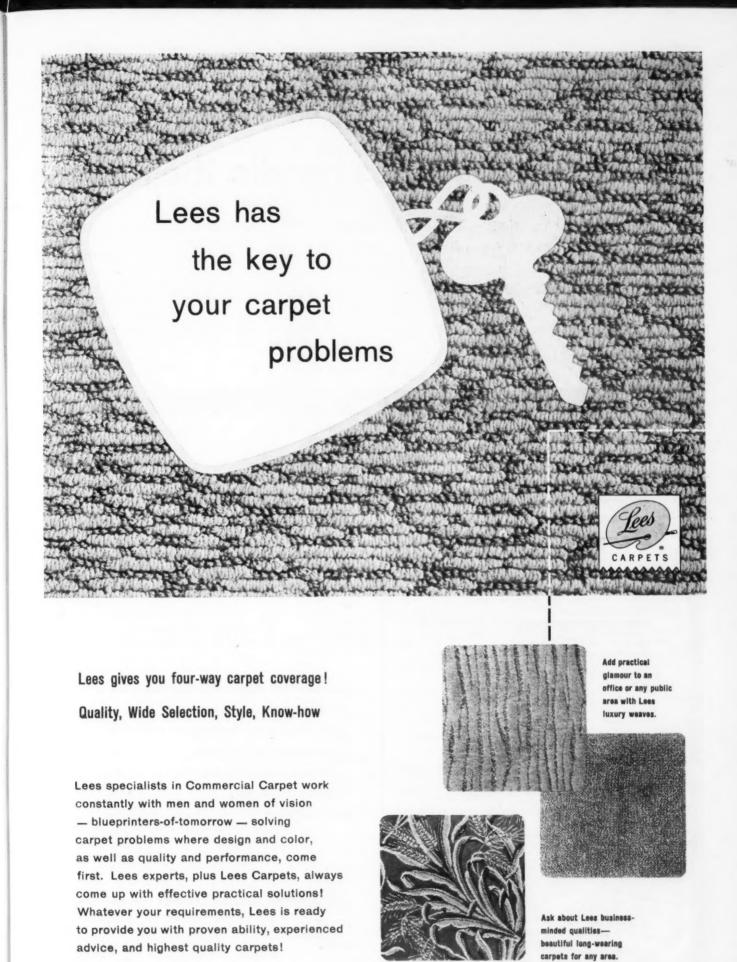
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FOR SPECIAL INFORMATION, WRITE TO: COMMERCIAL CARPET DIVISION, JAMES LEES AND SONS COMPANY, BRIDGEPORT, PENNA.
(Circle 127 for more information)

How companies handle their sales

Progressive firms use their sales meetings as a key management tool. MM's new survey shows no startling trends—but findings do re-emphasize the value of management participation.

How do you get the best from your salesmen? One method, used by companies of all sizes and types, is to conduct well planned, purposeful sales meetings. In perhaps the majority of cases, the sales meeting provides the salesman with an opportunity to recharge his batteries. In only a mi-

WHAT THEY SAID 1. Do you hold national or regional sales meetings? 4. Where are your sales meetings usually held?* National Hotel 28% 86% Regional Company offices 42% 53% Both Trade show 30% Resort greg 9% Convention hall 2. Who attends your meetings? Cruise ship 2% All sales personnel Salesmen only 5. What does your sales meeting program 3% District sales managers only include?* 2% Others Speeches Demonstrations Movies and slides 67% 3. What are the purposes of your sales meetings?* 65% Exchange information and selling techniques Problem-solving workshop 86% 60% Kick off new sales program Social activities 74% 49% Part of sales training program Awards and incentives 67% Social get-together Improve company relations with salesmen 6. Does your company pay expenses of partici-2% pants? Full expenses 75.5% Part expenses *Percentages totalling more than 100% 13.0% are based on cumulative responses. No expenses 11.5%

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nority of cases are sales meetings conducted on a strictly social, goodtime basis—as a reward for a job well done.

To find out management practices with regard to sales meetings, MANAGEMENT METHODS conducted a nationwide survey among a cross-section of companies known to hold special meetings for their sales personnel. The results uncovered no startling trends, but did show that sales meetings, regardless of size or frequency, command a great deal of management attention.

Talk by management

For example, the survey showed that a talk by the chief executive or other top level management personnel is a prime ingredient in the sales meeting program—almost a must. In nine out of 10 of the companies surveyed, such talks are used. However, a number of these companies stressed the fact that in most instances a short, to-the-point speech was most effective.

Most of these firms also use other devices to add spice to the sales meeting—such things as demonstrations; movies; slides; exhibits of advertising tools, ads, product publicity (see chart). Inclusion of a problem-solving workshop was found to be most popular among smaller companies. A few of the survey firms use award presentations and other incentives to stimulate competitive spirit.

Location is an important factor which management must consider in the planning of sales meetings. A preference for hotels, making available required room and service, was shown by a large majority of firms for both regional and national meetings. From a practical angle, smaller regional meetings are often held at company offices. The advantages are that this saves valuable time on the part of top management and provides salesmen with an opportunity to "catch



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Regardless of how you bill or ship... whether by rail and truck exclusively, or by parcel post or express, or any combination of these... Baltimore Business Forms will combine all forms into one. Invoice, labels, packing slips, accounting copies and bills of lading, all to be typed at once.

If you have a combination of rail, truck and parcel post, all of the above forms should be used except the bills of lading . . . which you don't have to use for parcel post. When bills of lading are needed they can be combined

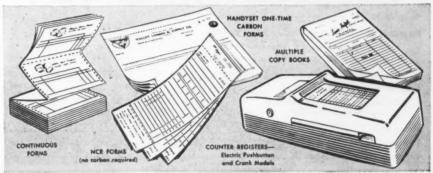
in perfect registration and all copies can be written at one time. You owe it to yourself to investigate these quick, easy ways to organize and cut costs of your billing and shipping.

Send for free samples or recommendations! At Baltimore Business Forms every representative is an experienced "system planner," capable of solving any business form problem. Write today for samples or an unbiased recommendation. The Baltimore Business Forms Co., Dept. A, 3142 Frederick Ave., Baltimore 29, Md.

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(THE BALTIMORE SALESBOOK COMPANY)

Saving time and reducing costs in business and industry



(Circle 106 for more information)





New! Cosco Chairs, Settees, Sofas and Occasional Tables . . . styled to create a warm, congenial atmosphere in reception room, conference room, private office. Introduces the last word in furniture comfort, Leaf Spring Suspension: cushions ride buoyantly on flexible bands of tempered steel! Legs extended in rear to protect walls. Socket glides stay level when furniture is tilted. Reversible coil spring or foam rubber cushions. Cloth and plastic upholstery; many patterns, colors. Bonderized frame has a chip-resistant, baked-on enamel finish. Tables have lifetime FibeResin tops and shelves. Prices start surprisingly low. Call your Cosco dealer or mail coupon today!

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Please send information on new COSCO Business Furniture.	Please send information on COSCO Office Chairs.
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(Circle 122 for more information)

up" on the events at the home office.

Twelve per cent of the firms surveyed find it expedient to hold their sales meeting at an annual trade show where the company's products are on display.

Implementation of telephone hookups and closed circuit television have enabled larger companies to accomplish many of the purposes for which sales meetings were previously held. Through these modern devices, management is able to meet with their district sales personnel and at the same time eliminate the loss of time and money to a company involved in meetings held on a regional or national basis.

As seen by the chart (page 11), all sales personnel are almost always on hand at the sales meetings held. However, management finds it profitable also (in about 20% of these firms) to include one or more of the following-dealers, distributors, designers, technical personnel or the company's advertising agency.

Companies pay expenses

"Who pays?" is a frequent question faced by executives. The Man-AGEMENT METHODS survey indicates that more than two-thirds of the companies polled pick up the tab for all expenses incurred by their salesmen-thus stimulating a larger and, in many cases, a more receptive turnout. In instances where only partial expenses are paid an attendee generally has to get to the meeting on his own and in a few cases provide for his own meals. A large majority of the 11.5% companies which pay none of the attendee's expenses hold their sales meetings at trade shows, where the salesman is expected to be on hand anyway.

Should families be invited to sales meetings? Management in 70% of the cases says definitely no and encourages their salesmen to come alone. Some (25.5%) leave the choice to the attendee but most of these also leave the family's expenses to him. A few (4.5%) do encourage families to come along; one company indicated that it is adopting this procedure for the first time this year. Where this is the case, the company usually pays full expenses or splits them with the at-

tendee. m/m

Even the wastebasket can go-there's one inside this desk.

How to be a "clean desk" man

A new Organized Desk with an ingenious ability to lend a hand to a man at his work •

Ever noticed the amount of useless stuff that drifts around on top of a desk? And a lot of desk drawers too are in the same state of clutter.

This condition gets in the way of a lot of work. It's the reason why the new Shaw-Walker Organized Desk is such a big help in getting things done.

Move in behind one of these Organized Desks and

you make a clean sweep of desk top clutter and desk drawer hodgepodge. Here's how it's done. Work-Organizing drawer interiors provide specific space for 75% of the things that now clutter your desk top.

There are four revolutionary advances: A double capacity letter file, in-drawer wastebasket, in-drawer telephone, 4 in-drawer letter trays. Ever hear of anything so efficient?

See these new color-styled Organized Desks at our branch or dealer store, or write Shaw-Walker, Muskegon 23, Michigan, for pictures, facts.



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HAW-WALKER Largest Exclusive Makers of Office Equipment Muskegon 23, Mich. Representatives Everywhere

(Circle 142 for more information)

40 years of COTTON* for cleanliness at Western Printing



• From a small basement print shop, in 1907, to one of the nation's largest lithographic organizations and the world's largest publisher of children's books and games-that's the growth story of Western Printing and Lithographing Company. And from the very beginning, the company has been distinguished by its personal regard for people and its active interest in better performance.

Just how this attitude works to everyone's advantage is seen in the use of cotton towels in their headquarters at Racine, Wisconsin, for over 40 years. Cleanliness is the major factor, here, along with safety and convenience. Cotton towels remove printer's ink better. They're fresh, clean, soft. They reduce fire threat of volatile inks. They pose no storage or inventory problem.

Progressive management makes use of these many cotton plusses. Why not follow their lead-give the towel job to cotton in your office building, plant, or institution. For free booklet on how cotton towel service will help you, write Fairfax, Dept. G-12, 65 Worth St., New York 13, N.Y.

Here's How Linen Supply Works . . .

You buy nothing! Your linen supply dealer furnishes everything at low service cost-cabinets, pickup and delivery, automatic supply of freshly laundered towels and uniforms. Quantities can be increased or decreased on short notice. Just look up LINEN SUPPLY or TOWEL SUPPLY in your classified telephone book.

Clean Cotton Towels . . .

Sure Sign of Good Management

Fairfax Towels



WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH STREET, NEW YORK 13 (Circle 151 for more information)



Automation answer to small business



Automation can be the key to "economic survival" for thousands of small business men who have to co-exist with larger companies in an automatic world. The

small business (employing fewer than 1000) has only two alternatives as regards automation. It can ignore it and then be forced on the defensive to meet competition, or it can look at it realistically and plan a sensible course

of adoption.

There are a host of mechanical, electrical and electronic instruments that sense, control and report on physical and chemical conditions vital to production that can be purchased at conventional equipment costs. Intelligently and appropriately applied, these instruments can result in a better quality product, with fewer rejects and less waste of men and machinery.

Henry F. Dever, president, Brown Instruments Division of Minneapolis-Honeywell, before Metal Manufacturers Association of Philadelphia.

Salesmen: why don't they sell?



The general attitude toward selling—on the part of salesmen, sales managers, and top executives alike-has changed from aggressiveness to apathy. Once salesmen

were expected to go out and sell. Now their main function seems to be one of service. Not that service isn't important; but if it isn't coupled with some honest effort to persuade people to buy, it is bound to be slow and sluggish as a stimulant to sales.

Most salesmen today are so filled with the idea of low-pressure sellingwith the emphasis on the low-pressure part of the term-that they shrink from even trying to persuade. What's more, their managers let them get away with it, lulled into false security by the promise of technical development to provide a better product and the potential of advertising to presell the product before the salesman even asks the prospect for an appointment.

There is nothing simple about lowpressure selling. It depends for its effect on a small amount of obvious pressure, usually in the form of a consciously guided discussion of the customer's problem. Such subtle leading is not easy to practice or teach.

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As in the case of so many other problems, the responsibility for solution depends on management attitude. The sales manager must exert himself in working with his salesmen. He must provide intellectual as well as emotional leadership. He must get out in the field, or on the floor, and coach the salesman on the job.

Moreover, if the sales manager really begins to think in terms of lowpressure selling-again, with the emphasis on selling-he will find that questions of training, compensation, quotas, field organization, territories, and so on, all take on a new light. He will need to examine them, and in many cases the answers he finds will indicate differences from the comfortable way of doing things that he and his salesmen have been enjoying.

Also, and most important of all, top management has learned that its own attitude is the most significant factor. Rather than "buying" gimmicks or ready-made systems, management must be willing to study its own particular needs, preferably with the guidance of experts who know what to look for and what is available in the way of help. Just to want and expect higher performance will do a world of good; but when management backs that up with specific measures. then the drive for improvement really comes alive, the salesmen take hold, and the results begin to multiply. October, 1956 Acme Reporter.

Maintaining ethical standards



Some managers see little wrong with what they term "kidding employees along to keep 'em happv. This can involve withholding a little information here, stretch-

ing the truth a bit there, breaking a promise another time, and other acts of that sort. These lapses in ethical standards are damaging to personnel development. Respect for management is undermined. Confidence and incentive are lost. Effective communication becomes difficult.

If a sales person is promised a raise within a certain period, it is highly important that this promise be kept. Similarly, if a salesman is promised that he won't be transferred, the same is true. Many managers don't consider themselves untrustworthy when they keep putting off things they've agreed to do. But the person who is counting on action being taken will lose confidence in a boss who distorts facts and doesn't keep his word.

Donald F. Mulvihill, professor of marketing, University of Alabama, in Sept. 1956 Small Marketers Aids, published by Small Business Administration.

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tax quiz

RECENT COURT CASES

by Benjamin Newman

Tax Attorney, Koenig and Bachner, New York.

THE QUESTION

A wife files an individual tax return. Should the refund due her be applied to a tax deficiency owed by her husband?

THE FACTS

For a number of years a wife had been reporting the income from a business that was conducted in her name, and she had been paying the taxes on the business. In one year she overpaid her income tax and instituted proceedings to recover the overpayment. However, in another proceeding, separate and distinct from this one, it was determined that the income of this wife's business was in fact attributable in its entirety to her husband

and that she was simply his nominee.

A deficiency in income tax existed against the husband as an individual. Therefore, when the wife began action for a tax refund, the Commissioner of Internal Revenue intervened and objected, contending that a refund to her would nullify the deficiency against her husband.

May the wife recover her overpayment?

THE RULING

Inasmuch as the wife and her husband filed individual returns, they are considered and are to be treated as separate and distinct entities, declared the Tax Court. In so ruling, the court stated that it knew of no authority for applying an overpayment by one taxpayer against the deficiency of another. Accordingly, the court upheld the wife and granted the refund. (Edith Stokly vs. Commissioner of Internal Revenue, U. S. Tax Court, decided Aug. 6, 1956.)

THE QUESTION

Mr. Jones, a majority stockholder of a corporation, waives his right to receive corporate dividends. Is his income taxable to the extent of the dividends waived?

THE FACTS

Mr. Jones owned 65% of the capital stock of a corporation. His relatives and friends owned 25% of the stock and the remaining 10% was owned by the corporation employees. The financial position of the corporation was such that dividend payments could not be made. To permit dividend payments to the minority stockholders, Mr. Jones

waived his right to any dividends declared by the corporation up to January 1, 1959. This permitted substantial dividend payments to the minority stockholders without depleting the corporate working capital.

Did the right to receive such income constitute taxable income to Mr. Jones?

THE RULING

In his Revenue Ruling No. 56-431, the Commissioner of Internal Revenue ruled that on the basis

of the facts it was apparent that the primary purpose of Mr. Jones in signing the dividend waiver was

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to benefit his relatives. His alleged business purpose of paying larger dividends to key stockholders is deemed incidental. Mr. Jones' waiver of his right to receive dividends, thereby benefiting his relatives and key employees, must be considered the realization of income by him to the extent of the dividend payments waived.

THE QUESTION

Is the executor of an estate taxable on the full amount of commissions allowed under the state law despite his acceptance of a lesser sum?

THE FACTS

Under most state laws the executor of an estate is entitled to a commission for his services. This compensation, subject to the approval of the Probate Court, is generally a small percentage of the value of the deceased's property. In this case the state law allowed the executor a commission of 5% of the value of deceased's personal property. The executor, however, waived his right to receive full commissions and entered into an agreement to receive a lesser sum. The agreement was executed before any services as executor were rendered. Is the executor liable for income tax on the full amount of commissions allowed him by law or is he taxable on the agreed lesser sum?

THE RULING

The Commissioner of Internal Revenue in his Revenue Ruling No. 56-472 held that, based on the foregoing facts, a clear and irrevocable waiver of the right to receive commissions was indicated. This showed an intent by the executor to render gratuitous services. Accordingly, if the executor's agreement to accept a lesser sum than that allowed by state law is binding, he will be taxed only on the sum actually received by him. The state law in this case is not binding upon the executor and does not constitute the constructive receipt of income by him.



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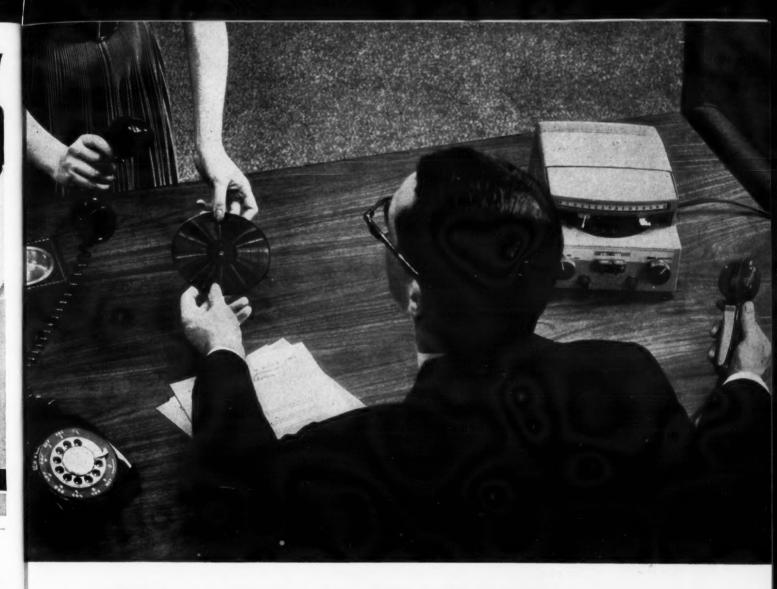
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Why Argus is joining Sylvania

Robert Lewis, one of today's recognized management leaders, speaks in straightforward words through this transcript of an exclusive interview with a Management Methods editor. He describes how his small firm will benefit in becoming a part of a much larger corporation. With examples from his own experience, he defines what scientific management really means, and he tells how Argus profits by using the methods of modern management.

EDITOR'S NOTE:

A FEW DAYS AGO, on November 21, the stockholders of Argus Cameras, Inc. voted approval of the sale of their company to big, fast-growing Sylvania Electric Products, Inc. °

Earlier, when news of the Sylvania-Argus deal first broke, some people were surprised. The reason: although Argus is a relatively small firm (net sales fiscal 1956: \$20 million), it has held a major position in its industry, competing with much larger firms including Eastman Kodak (net sales 1955: \$714 million). Argus President Robert Lewis has often made a point of the fact that a small organization such as his own provides many important management advantages.

Why, then, should Argus want to change its status and itself become the arm of a giant like Sylvania? And why did Sylvania want Argus?

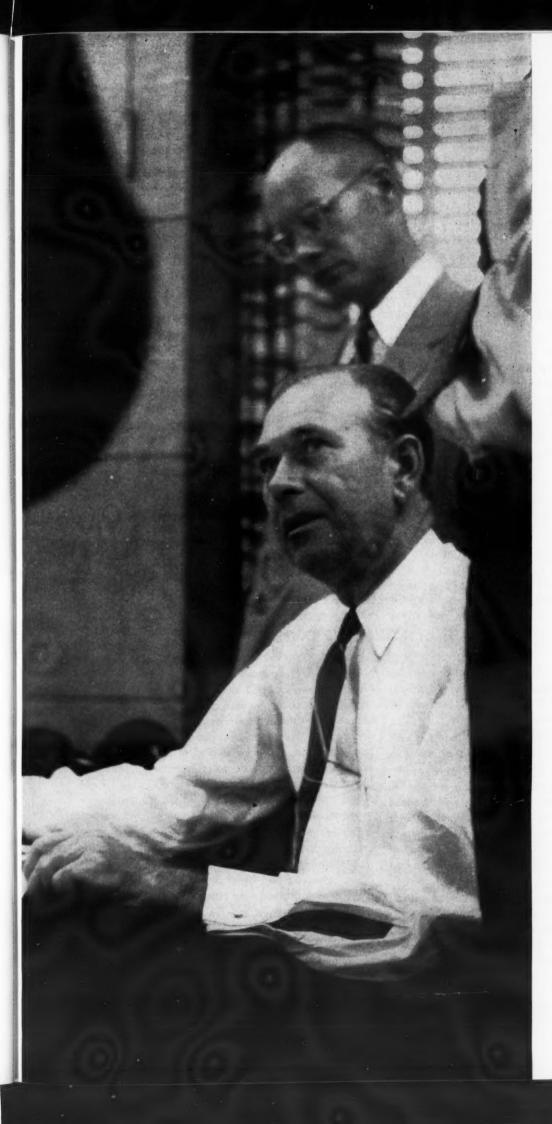
A few weeks ago Management Methods set out to get the answers to these questions. After preliminary research, a private, personal interview was arranged at Argus headquarters in Ann Arbor, Mich., between President Lewis and an MM editor. The entire conversation was recorded on tape.

From this interview we learn the facts behind the new Sylvania-Argus connection—facts that do not necessarily show on the surface.

But we also learned a lot more: the entire story of how Argus is managed, and how the company has been profiting from the use of modern, scientific manment methods.

Here is that story, in President Lewis' own words. This actual transcript of MM's exclusive interview has been only slightly edited and re-organized to simplify its structure.

^a This issue of MM actually goes on press before the November 21 stockholders' meeting. However, every prior indication has been in favor of approval; we're willing to take the risk of being caught off base in order to bring our readers this timely interview article at the earliest possible time. We hope the timely nature of this material will also explain why we have returned so soon to the photo equipment industry in this series profiling the new kind of manager (see Management Methods, October 1956).





Covered in this interview article

- How Argus builds "general managers"
- How a small firm can adapt a "big business" type of management
- The facts about the committee approach
- The Argus system of checks and balances
- Why diversification doesn't always work
- What makes an executive and what is his biggest job
- Why Argus stresses merchandising and distribution
- How Argus "solves" its financing problems
- How Argus gets flexibility through "makeor-buy"
- How Argus uses statistical sampling in inventory management
- How to get linear programming started
- What scientific management really is





"There are certain advantages to being small, others to being big. We'll benefit in both ways."

both on our own small size and on Sylvania's bigger size.

O. What are some of the specific benefits you will gain?

A. They're numerous. Take merchandising. We are both in photography and serving many of the same customers. By coordinating our selling and distribution, we'll be able to improve our competitive position. The same applies to advertising. Sylvania has a network TV show, for example, that immediately becomes available to us. They have warehouses across the country that become available to us. A small company like ours couldn't possibly maintain distribution facilities such as these.

Sylvania has been able to build up an excellent research and development arm that we will make use of. As a part of Sylvania, our financial position is strengthened, in case we should need some new capital for expansion.

Another point is that Sylvania

will handle for us a good deal of what Don Mitchell (president and chairman of Sylvania) calls "drudgery" work. Payrolls, for example. That kind of thing will be centralized and handled by Sylvania's million-dollar electronic computer (see box below). Again, in an organization of our size, we couldn't afford equipment like that, but now it's available to us-and will be useful to us in our operations research work, for example, and our statistical inventory system. All of these things help us without diminishing our autonomy.

Q. Will your operations—the management of your company and the way it works-be altered as a result of your new affiliation with Sylvania?

A. We are going to stay as a complete autonomous division of Sylvania, but we will work closer with their photographic unit so that we will take full advantage of our common strength.

Mr. Lewis, you've been known as a man who believes a small company can compete with a giant concern on its own terms—and succeed. Does the Sylvania development mean you've changed your mind?

A. No. There are certain advantages to having a small organization, other advantages to being big. We expect to benefit in both ways. Argus will be able to capitalize

A BONUS FOR ARGUS: SYLVANIA'S COMPUTER CENTER

ARGUS PRESIDENT Robert Lewis reports that one way his company will benefit by becoming a part of Sylvania is through having much of its "drudgery" work taken over by Sylvania's electronic equipment.

At a recent AMA conference, Controller Leon C. Guest Jr. and other Sylvania executives described their new electronic system, which began operating last March.

The first problem, they said, was finding out how to make electronics economical in a strongly decentralized operation (Sylvania has some 47 plants and 19 laboratories in 14 states). The answer was to centralize recordkeeping without discarding the decentralization that "for us, at least, has proven without any shadow of a doubt the best system of management."

Thus the problem became one of communications: all locations had to be tied together in a communications network. Western Union designed special equipment for a private wire network; then a data processing center was established in Camillus (near Syracuse), N. Y., to house a Univac.

The system has already taken over much of Sylvania's "drudgery" work. Slated for automation are all company payrolls, order handling, invoicing of "off-the-shelf" manufactured items, accounts receivable statements, and statistical records that are a by-product of the billing operation. Applications will be studied in the more complex areas of market research, sales forecasting, production planning, and inventory control; data processing for nonoff-the-shelf products; and scientific applications for engineering, atomic energy, electronic systems, and research.

This centralization of data processing, Controller Guest emphasized, "is completely consistent with the decentralized operating philosophy on which our company is managed. Sylvania's firm belief is that data processing will make decentralization even more effective."

The private wire network connecting Sylvania locations is used for administrative communication as well as for computer applications. Reductions in long distance telephone and other communications costs are approximating the monthly rental charge for the private wire system.



Brinkerhoff (production), Lewis, Patton (purchasing), Detweiler (vp)

Q. Will you continue as president?

A. Yes, I'll continue as president of the Argus Division of Sylvania.

Looking at the other side of the coin, specifically how will Sylvania benefit by absorbing Argus into its framework?

A. Well, for one thing, it will mean a broadening of their line in the photographic field. Actually it's a form of diversification. But I don't think this is the biggest consideration from Sylvania's point of view. I believe that a primary interest in us is the fact that in a company like ours, we build general managers like no big business can. Sylvania is interested in us because we have a crew of young guys who know business from one end to the other.

Q. Do they know business generally, or this business specifically?

A. They know business! Sure, they know it through the medium of this business but there is not much difference between businesses these days. A good industrial relations man, for example, is just as good in one company as he is in another. The members of our management have all been through every phase of our business, all the way from legal to industrial relations.

You take our top 15 or 20 men. You name any phase of the business—and they know it. They don't know it from any academic exposure; they know it from sweating it out. And this isn't just at the top; it's true at the lower levels too.

What do you do that makes it possible for your management people to develop this kind of over-all management skill?

A. We follow one of the simple axioms—something that is so simple it almost sounds silly to say it. But

"Our crew knows
business from
end to end. We
build general
managers like
no big firm
can"

I think the thing we are trying to do all the time is to push this job of decision-making down as far into the ranks as we can get it.

Q. How do you do it?

A. We have a committee management. Our Management Committee actually runs this company. It consists of all our top men. Now, we've had this committee for about seven years. But along the way, we found that it was difficult for the Management Committee to make all of the decisions necessary in the company. We finally had to grab ourselves by the back of the neck, pull back and take a new look at the situation. The result was that we created another group called the Operating Committee. This newer group now makes all the operating decisions. It's made up of people at the second tier.

We try to avoid having the top group make anything but policy decisions, or get into the really unusual problem areas. One of the key reasons for our Operating

(Continued on page 64)

1. Strategic

INVENTORY

2. Tactical

MANAGEMENT

3. Technical

Here is a simple three-part device that helps to identify responsibilities for inventory costs at various management levels and to achieve inventory economies.

Donald W. Moffett, Senior Consultant, Methods Engineering Council, Pittsburgh, Pa.

In recent years, considerable progress has been made in the scientific management and control of inventory investments. The new methods have demonstrated, beyond reasonable doubt, that inventory economies can be realized in a well-run organization.

But these new methods—as good as they are—will not work effectively unless the organizational climate permits. You can't get away from the fact that inventory costs are directly related to marketing and operating decisions. Everyone with decision-making power can influence inventory expenses. Moreover, these decisions are not a special province of top management. They are made at all levels.

These facts raise two critical management problems:

1. How to identify the types of decisions that affect inventories at each level of management personnel.

2. How to create awareness of inventory costs to make sure they are given proper consideration when decisions are made.

Here's a simple example. A company decides to operate warehouse outlets in all principal cities. This decision is primarily concerned with customer service. It is a sales decision. The secondary—though immediate—result is a pronounced effect on the over-all inventories required by the business.

Or take another case. It is generally recognized that production scheduling effects work-in-process inventories. Thus, concentration on such goals as smoother flow of work, stability of work load, and elimination of shortages often leads to scheduling with a great deal of slack. The result: excess work-in-process inventory.

A pattern for control

How can this awareness of responsibilities for inventory costs be

brought home to management people? A pattern of thinking to simplify this problem has been suggested by Lauren F. Sargent, a senior consultant of Methods Engineering Council, who has made many technical contributions to the technique called inventory management.

Mr. Sargent suggests that we think of inventory management as having three phases. He calls them:

- 1. Strategic inventory management.
- 2. Tactical inventory management.
- 3. Technical inventory management.

The basic concept

Strategic inventory management is the creation of the general conditions under which inventory is carried. Top management decisions on product design, markets to be served, plant locations, methods of distribution, and the like determine

1 TECHNICAL INVENTORY MANAGEMENT

Analyze the specific inventory situation and maintain the most economical control of incoming goods under existing conditions.

Components	Factors that control size	Conditions
Turnover	Delivery lot quantities	Cost of carrying inventory
Reserve	Reserve cycle	Costs of getting inventory
In Transit	Timing of disbursements	Costs of not having inventory
Excess	Effects of decisions	Nature of demand
Surplus	Adjustment to changing conditions	Delivery ratio
Miscellaneous		Available space
Work-in- Process	Production cycle time	Total unit processing
110Cess	Average rate of input of material, labor, and	Waiting time
	burden	Volume of input

Management Action:

- 1. Procure replenishment lots in economic lot quantities.
- 2. Plan economic reserve cycles.
- 3. Provide for prompt adjustment of inventory controls to changing conditions.
- Provide for accurate and prompt control of material in process to avoid delays in the production cycle.

the general nature of the inventory problem.

Tactical inventory management deals with supply and demand, and cost factors. When strategic decisions have been made, they establish the need for certain constituent inventories such as:

1. Raw materials

0 0

- 2. Manufacturing work in process
- 3. Finished parts
- 4. Finished goods
- 5. Consignment stock
- 6. Warehouse stock
- 7. Goods in transit

The tactical area considers relationships between such things as production scheduling, operating methods, shipping methods, purchasing costs, and other conditions which influence these inventories. Tactical inventory management is the adjustment of such conditions to provide for optimum inventory economy.

The third area-technical inven-

tory management—is the determination of the most economical inventory levels under existing or forecast conditions, and the control of incoming goods to achieve these levels.

When strategic decisions have established the basic inventory pattern, and when tactical decisions have set up the conditions surrounding each constituent inventory, then the people who are responsible for the direct control of inventory can plan their operation to achieve maximum inventory economy under the conditions as they see them. The conditions and cost factors with which tactical inventory management deals are fixed considerations in technical inventory management.

Strategic, tactical, and technical inventory management are the successive subdivisions of an extremely large problem. Using these divisions, however, permits the executive to assign responsibility and thereby control inventory costs through positive action.

To illustrate the value of these divisions, let's consider them one by one, in greater detail.

Technical inventory management

We'll take technical inventory first because it is the foundation upon which all other inventory management rests.

In any specific inventory situation, there is a *most economical* inventory level. The calculation or approximation of this level, and the control of supplies and production to achieve it, is technical inventory management.

For example, consider the problem of operating a storeroom which supplies parts to a manufacturing plant or department. The economy of this operation depends on certain cost factors and conditions which surround it. But the individual who directs such an operation is not responsible for controlling the factors and conditions. His job is to make the best of them. In other words, he plans his own action to achieve economy within an environment as he sees it.

A more general description of technical inventory management is shown in Figure 1. In this chart, technical inventory management is defined in these terms:

Analyze the specific inventory situation, and maintain the most economical control of incoming goods under existing conditions.

Below this statement there are three columns. In the first column are the components of inventory. These represent the elements of the inventory situation which are seen at the storeroom level. In the second column are listed the factors that control the size of the components. Delivery lot quantities, the reserve cycle, the timing of disbursements, and the like are the factors which are manipulated at this level to control the size of the components.

In the third column are listed the conditions which are imposed upon the technical inventory management area. As far as technical inventory management is concerned, these conditions are considered fixed. Personnel with technical inventory responsibility usually have no control over such things as the

2 TACTICAL INVENTORY MANAGEMENT

Analyze the conditions surrounding inventories and adjust them for maximum economy.

Conditions that influence inventory economy	Elements that create conditions
Cost of carrying inventory	Commercial—costs of interest, insurance, and taxes Storage—costs of material handling and space Risks—costs of risks of obsolescence, deterioration, and price decline Profits—return required for investment
Cost of getting inventory (Fixed costs per replenishment lot)	Clerical—costs of issuing and closing orders Monufacturing—costs of preparatory and cleanup work (setup) Purchasing—costs of negotiating purchases Receiving—cost of receiving and inspection
Costs of not hav- ing inventory	Loss of current and future profit Cost of expediting, changing schedules, or fast transport
Delivery Ratio	Urgency of customer need Demand variance—accuracy of forecast, stability of sales Delivery variance—accuracy, and enforcement of schedules
Available space	Extent and use of available space Type and amount of storage equipment Type and amount of materials handling equipment
Understanding effects of decisions Available facts Objectives of management	Training Communications Management Control Reports
Total unit processing time Waiting time Volume of input	Available equipment, efficiency of plant Extent of simultaneous operations Size of order Accuracy and effectiveness of scheduling

Management Action:

Keep the amounts of related costs, demand and delivery variances, and the amount of work in the plant as low as practical.

Keep the efficiency of plant, the accuracy of schedules, and the extent of simultaneous operations as high as practical.

("As practical" means that any further favorable change will cost more than it is worth.)

cost of carrying inventory, the costs of getting inventory, and the other items in this column.

This chart can be read in this way: Personnel responsible for technical inventory management observe the conditions in the third column, to determine what they should do about the factors in the middle column in order to achieve the proper results in controlling the components in the first column.

For example, the cost of carrying inventory and the costs of getting inventory are conditions which determine what should be done about delivery lot quantities. Delivery lot quantities are then controlled to provide for the most economic turnover component of the inventory.

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Personnel with technical inventory management responsibility should attempt to achieve conditions in which the total of all of the costs which occur are at a minimum. The principal ways in which improvement can be made by technical inventory management are:

1. Procure replenishment lots in economic lot quantities.

2. Plan the economic reverse cycles.

3. Provide for prompt adjustment of inventory controls to changing conditions.

4. Provide for accurate and prompt control of material in process to avoid delays in the production cycle.

Inventory management personnel can also assist by demonstrating the way in which certain conditions limit their ability to plan economical inventory levels. Such evaluation then guides those one step higher who are responsible for the tactical area in planning their activities.

Technical inventory management is important to management thinking for three reasons:

1. It is the quickest action that can be taken to control costs because it deals directly with the inventory levels of individual items.*

The mathematical mechanisms which are used for control of inventory in a situation like this are available, but detailed explanation would lengthen this article considerably. Briefly, it is known that the inventory can be partitioned into components, and each component related to the factors that control isize. Furthermore, for a given set of conditions, it is possible to calculate (or approximate) themost economical magnitude for the factors. A book covering the details of this aspect is advertised on page 36. EDITOR.

2. For good tactical and strategic action to be effective, activities in the technical area must be set up to capitalize on them.

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3. Conditions which limit inventory economy in the technical situation show what improvements can result from action at the next higher level—the tactical inventory area.

Tactical inventory management

The tactical area of inventory management deals with the conditions that surround individual inventory situations. Decisions in this area usually involve broader responsibilities and higher authorities than technical inventory management. As we have said before, tactical inventory management deals with the conditions that are considered fixed by the more specific technical inventory level.

Figure 2 illustrates the way in which these conditions are dealt with. The heading says that the function of tactical inventory management is to analyze the conditions surrounding inventories and adjust them for maximum economy. In the chart, the left-hand column shows conditions that influence inventory economy. These are the same conditions which were considered by technical inventory management to be fixed. The tactical area regards these things as controllable. In the right-hand column are shown the elements that create the conditions. Tactical inventory management adjusts these elements to improve inventory economy.

For example, the cost of carrying inventory is considered as a fixed rate in calculating such things as delivery lot quantities and reserve cycles. On the other hand, in the tactical area, we recognize that the cost of carrying inventory is made up of several elements—the commercial, storage, risks, and profit elements—which can be controlled to some extent.

Take this case: in the production of seasonal goods, the risk of obsolescence is often a major cost factor. There are, however, several ways in which this risk can be reduced. Standardization of parts, more careful planning of model changeover, the proper allowance for service parts, all can often make substantial reductions in the risk of obsoles-

cence. These tactical decisions will ultimately reflect themselves in a reduced cost of carrying inventory. In the same way, many of the other elements can be controlled to improve the conditions that influence inventory economy.

The responsibility for tactical inventory management is usually scattered throughout the operating management of the organization. Practically every major operating or marketing decision will have some effect on inventories.

To achieve good tactical inventory management, the executive must fix the responsibility for these effects at the points where the decisions are made. He must also arrange to provide the people who make the decisions with the knowledge of inventory management principles that they need for guidance.

To do this, the executive can make use of his inventory management specialists—first to provide training and instruction, and then to formulate control reports which evaluate the results of tactical decisions. This is shown in the next to the last item on the chart.

At the bottom of Figure 2 is the general type of management action which is taken in the tactical area. As a general rule, tactical inventory management consists of keeping amounts of related costs, demand and delivery variances, and amount of work in the plant, as low as practical. Keep efficiency of plant, accuracy of schedules, and extent of simultaneous operations as high as practical.

Note that as practical means that any further favorable change will



ABOUT THE AUTHOR

Donald W. Moffett is a graduate mechanical engineer (Rensselaer Polytechnic). As a senior consultant for Methods Engineering Council, international management consultants, he pioneers in down-to-earth industrial use of mathematical techniques for management decisions (linear programming) and inventory operations (inventory management). His special field is planning and administration.

cost more than it is worth. In other words, in tactical inventory management we have the responsibility for *continuous* review and appraisal of the elements shown in the second column of the chart to determine whether further change would be desirable.

Strategic inventory management

As its name implies, the strategic area of inventory management deals with basic factors and long-range planning. These are the areas of top management decision-making.

Figure 3 (p. 44) summarizes the strategic area. The responsibility for this area is simply defined: Consider properly the effects upon inventories when making major, top management decisions.

Top management, in laying out the basic plans of the business, establishes also the basic patterns of the inventory requirements. Furthermore, any decision which changes these patterns may have far-reaching effects on inventory economy.

The chart in Figure 3 illustrates the relationship between the primary operating conditions which are affected by top management decisions and the economy of inventories.

The left hand column lists "Elements of Conditions that Influence Inventory Economy." These elements are the same ones that were shown in the right-hand column of Figure 2, but arranged in a different order for convenience. In Figure 2 these elements were presented as subjects for tactical inventory management review and adjustment. Figure 3 shows them to be also subject to the influence of the "Primary Operating Conditions" in the right-hand column.

Tactical inventory management might seek to reduce the cost of the risk of obsolescence by improving the standardization of parts. The extent to which this can be done, however, may be strictly limited by the nature of the market that top management has decided to serve. Furthermore, changes in top management policy may at any time change these limitations.

Because of effects like this, the executive must analyze and understand the effects of his broad de-

(Continued on page 44)

Don't be an

The indispensable man defeats his own purpose — because he can't move ahead, or out. These case histories underscore the pitfalls, and how they can be avoided.

TV and Holly-wood writers have been having a heyday with the "corporate jungle." If we were to take their stories at face value, we would have to assume that a sharp knife and a pointed tongue assure a fast rise to the top—and failure to succeed is a direct result of someone's beating you to the punch.

It would be naive to say that cut-throat competition doesn't exist. Unfortunately, however, the man trying to compete often blocks himself from promotion by misinterpreting the rules of the game. One of the legends of this game—well known to every consultant in the personnel field—is "make yourself indispensable and it's easy to get ahead."

Actually, in practice, the legend proves to be a trap.

A case history

Here's an actual example of a top manager who prevented himself from advancing.

In an Ohio manufacturing organization of approximately 750 people, the sales manager long wanted to be promoted to a vice presidential level. His aim was eventually to become president.

The president liked him, and, in fact, viewed him as the most promising man in the organization. He wanted to promote him to a vacancy that existed because of the retirement of the executive vice president, and seriously considered the move many times. However, each consideration ended in a negative decision, because the president felt

the sales manager was "just too valuable a sales executive to lose. There wouldn't be anyone to run that department if he came up to join me."

The sales manager knew his abilities and was confident of doing an effective job as executive vice president. However, he had stifled the development of two promising assistants for several years, and both subsequently left for better jobs elsewhere.

What was the underlying reason for the sales manager's actions? It isn't as simple as saying he was afraid of "competition" from below. The psychologist can explain it simply and directly: the manager psychologically had a need to get exclusive credit for the company's sales. Thus he *unconsciously* discounted and discredited the accomplishments of other members of his department.

Psychological motivations

If the sales manager in the case cited above had an objective understanding of the dynamics of the situation—if he could have seen that his abilities were recognized and appreciated—he then could have proceeded to develop an assistant to take over eventually full responsibility, thus freeing himself for a position higher up. Unfortunately, the facts of corporate competition

what a company can do to provide for executive succession

From the company point of view, the answer to the problem of providing for executive succession is not new: it consists of a positive program of executive development. But before such a program can be undertaken, the management climate must be "right." It starts with the president. He must be able to take positive action and to demonstrate his desire to do so. The president must make the program a part of company policy. The best way he can do this is by beginning to develop his own understudies. His action can then realistically start the right kind of chain reaction—by executive example rather than by edict.

Any sound program for executive succession must be individualized. No generalized program can be presented that will fit every company.

A specific company program can be guided by logic, the experience of others, and your own company's resources. There are many ways of providing for executive development. Some of the basic steps for a program in any company include: determining company goals, analyzing needs, establishing policies, providing alter-

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by Dr. Martin M. Bruce

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don't make such objectivity easy to come by.

We continually meet situations which serve to reinforce our basic inadequacies. We strive for competence in various areas and in various ways, but we continually encounter individuals who are "better" than we. Everyone does—and the natural reaction is to find a way to surpass them.

The psychologist says: The person who does not enjoy a reasonable measure of personal security may jealously attempt to keep his job exclusively "his." He will probably devote his major efforts to the phase of his job where he excells, and exclude other people from



nates, and evaluating performance. If a given step works well in your company, by all means continue to use it. But nothing is sacred, and if something doesn't work, don't be afraid to throw it out and experiment with something new.

Progress should be evaluated periodically, and the criterion to be used is: are we actually building a team of future managers?

The following additional steps are suggested as a guide for building executive successors. They are not an all-inclusive program of action, but have proved successful for some companies.

Train on the job. The actual cost of hiring a new employee is usually far beyond the actual salary paid to the individual. It is financially as well as psychologically sound to promote from within. Aside from its use as a morale builder, there is no substitute for practical experience in a particular job in a particular company.

Delegate authority. As they become prepared for more important duties, give candidates a chance to as-

sume the actual responsibility of progressively higher jobs. Vacations and business trips by department heads are often valuable times in which to allow the assistant to take full charge and responsibility.

Shift assignments. The executive has a better chance for success if he has a broad background in various phases of his company's operations. Provide an opportunity for prospective managers to gain knowledge in several phases of the business, but don't expect them to be expert in all, or to learn them all in equal detail.

Encourage outside studies. Outside courses in pertinent management or technical areas should be included in a well-rounded program. The company normally assumes the cost, and allows time off for attendance at courses and seminars.

Use personal coaching. In a climate of mutual respect and confidence, the technique of personal coaching works well. It involves the boss' coaching the understudies, in detail, on how and why all important decisions are made.

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In dealing with subordinates and superiors, business people are constantly faced with competition and comparison. How much we permit our subordinates to develop—and in reality this means how much we permit ourselves to develop—depends upon our own degree of security.

An executive such as the sales manager before, not being fully aware of the psychological factors that are operating does not prevent the development of younger men deliberately. These things occur on a less-than-conscious level. He "just acts that way." The younger men "feel" it, and rebel against it. But neither do they recognize the situation for what it really is.

What the individual can do

The question arises: What can you, as an individual, do to make sure you don't become indispensable? Let's see how one executive—call him Bill Roberts—insured himself against getting pegged as "the only man who can do the job."

Roberts was a production specialist who had been marked for executive development by his own boss, as well as by division head-quarters and the home office. He was number two man in one of the large plants of a well-known oil company, with plants throughout the country.

As part of the company's plans for him, they assigned him to a department that acts as liaison between production at the plants and sales at the home office. While in this position, he became aware of a



ABOUT THE AUTHOR

Dr. Martin M. Bruce, Research Director with Dunlap and Associates, Inc., has been a psychologist with the U. S. Air Force, the War Department, a prison and in industry. He has been instrumental in aiding a number of organizations to create and run effective management development programs.

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loss operation at one of the company's specialized experimental plants. He felt that the situation could be remedied, and, in fact, had certain definite ideas on how it could be accomplished. He offered his plan to the vice president to whom he reported.

The plan was subsequently carried to the attention of the president, who was already aware of Roberts' previous record with the company. After only 60 days in his liaison job, Roberts was offered the position of plant manager of the

experimental plant.

It was a very specialized operation, and Roberts knew that once he had put the plant on a paving basis, he might be considered irreplaceable. But he felt that he was in a bargaining position; he decided to insure his future development

and promotion.

Roberts made a two-part "bargain" with the president. Roberts insisted first on hiring a man who could start training immediately as replacement for the plant manager post that Roberts himself was about to undertake. The second condition was an agreement that he would remain as plant manager for a period of not more than two years. The president agreed to both con-

The new plant manager spent four months searching for a trainee with the proper background. By the time he located a candidate, he already had the experimental plant operating in the black.

Now, a year and a half since Roberts took over, the plant operation shows a healthy profit. Having created an atmosphere that provided personal security, he was able to develop the trainee. The trainee has assumed a major share of the operating details and responsibility. Next month Roberts will move back to the home office-less than two years after starting his assignment. His new position is vice president in charge of operations.

Roberts, of course, is a particular man in a particular company, and action identical to his might not be appropriate under different conditions. But the case history shows the kind of initiative that can be taken by the individual executive. And it shows the need for a company program that allows a man like Roberts to move ahead. m/m



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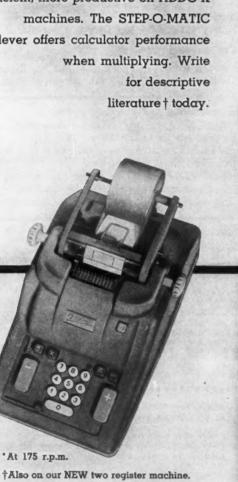
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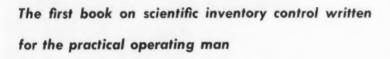
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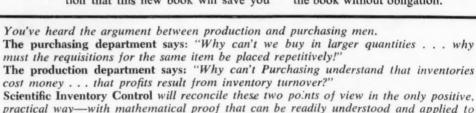
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How and when to use Commercial finance

by Howard M. Baltimore, Assistant Vice President Walter E. Heller & Co., Chicago

In this "tight money" period, expanding firms are taking a fresh look at the commercial financing company as a source of additional working capital. Here's a closeup look at how the factoring method can produce profits.

Fast growing companies face a persistent problem: the ever-tightening squeeze for working capital.

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As sales increase and business expands, meeting payrolls and paying bills may become ever more difficult—even though there is a favorable balance of current assets to current liabilities.

The reason: as accounts receivables increase, working cash decreases.

Many businesses in this period of tight money are finding traditional lines of credit insufficient; they need new modes of financing, or face the unpleasant task of telling customers that their own credit terms will have to be tightened.

A contracted money market is not the only reason banks may be reluctant to grant further credit. Since they lend depositors' money, banks must be conservative in types of loans granted and terms extended. Then, too, most banks are small: two-thirds are capitalized at less than \$150,000 and can make unsecured loans only up to \$15,000.

The result is that now many firms are turning to commercial financing companies—factors—for credit they cannot get in the traditional way. If a borrower can obtain all the funds he needs from a bank, he need not seek specialized financing. But when additional funds are required, the commercial financing firm may be able to solve the problem.

The job of the factor

What kind of service does the commercial financing house provide?

First, it may buy a firm's accounts receivables outright and assume the risks of collection. On the other hand, it may offer non-notification accounts receivable financing. This allows the borrower to make his own collections and to re-

pay the lender as he collects his receivables. In this type of financing, a company's open end accounts receivables are pledged as security for cash advances.

Both types of financing have the advantage of being non-inflationary; no money or credit is put into circulation without a corresponding production of goods. There is no term to be met, and the business is never over or under borrowed. Simply stated, the businessman has merely exchanged his immobilized accounts receivables for liquid capital.

In addition to accounts receivables, other assets (inventories, machinery, equipment) can be used to secure loans under the flexible financing programs offered by the commercial financing firm.

Installment financing is still another department of the modern financing company. Installment contracts are purchased from man-

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ufacturers (or their distributors) who sell industrial and commercial equipment. In effect, this transforms an installment sale into a cash sale

In addition to money, the modern commercial financing firm offers a great deal in the way of service. For instance, factoring has the effect of providing the client with a complete functioning credit department. Even in the case of non-notification financing, where credit risks are not assumed, the credit judgment of the financing firm is working for the client all the time. While no attempt is made to interfere with management, business counsel is always available when requested.

Do you qualify?

After you have decided to investigate specialized financing, you will find that a good commercial financing house is interested in helping you develop a flexible, comprehensive program adapted to your own needs. But, obviously, a commercial financing firm cannot

make every loan. What specifically does the factor look for in a borrower?

There is nothing mysterious about the mechanics of this type of financing. You will be asked only about the things any lender wants to know: character, background, reputation, credit standing. The man handling your inquiry will want to see current profit and loss statements and balance sheets, as well as those for a number of years past.

Since your accounts receivables will either be purchased outright if you factor, or used as collateral in accounts receivable financing, these accounts will be examined for age, diversification, past experience with debtors, and records of returns, offsets, and consignments.

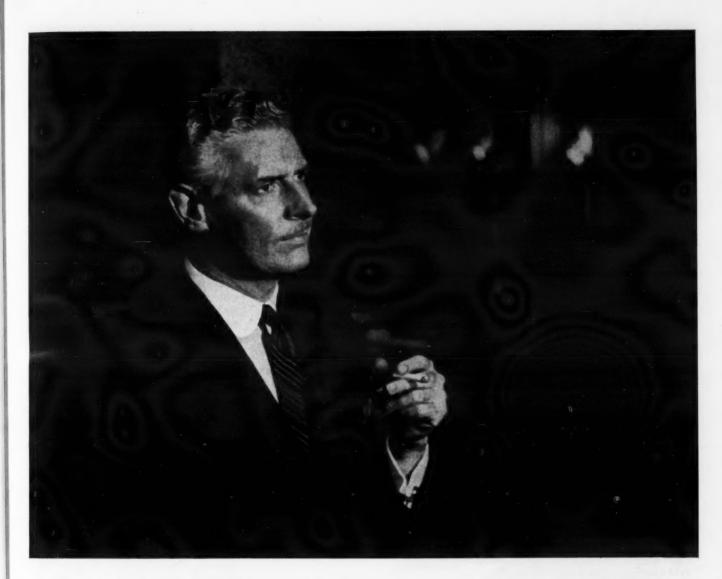
A detailed picture of your financial structure, operating conditions, and trends is then prepared. In the case of new products or processes, the lender will try to determine acceptance, and whether changes can be made to increase this acceptance or make the product or process

Is commercial financing profitable?

A ssume that a shoe manufacturer finds he is able to obtain orders for \$500,000 worth of shoes annually, in addition to current sales. While he has the plant, equipment, and material to fill these additional orders, he lacks working capital to finance the expanded volumes.

Since his ordinary bank lines cannot be extended, this manufacturer turns to a commercial financing firm to factor the \$500,000 additional sales at an annual cost of \$6,500. Assuming his normal rate of profit to be 6% of sales, his annual profit on the \$500,000 of increased business would be \$30,000 less \$6,500 factoring cost, or \$23,500 net. This profit would otherwise have been lost.

Another example: Assume purchases of a manufacturer lacking working capital run \$1,380,000 yearly, and that he usually has about \$170,000 tied up in outstanding 30-day accounts receivables. If unable to take cash discounts from his suppliers, he forfeits perhaps 2% of his purchases of \$1,380,000, or \$27,600. This amount in discounts could be taken at a cost of only \$17,000 to \$18,000 in financing charges.



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County	State
Type of Business. *Tr	ademark Reg. U.S. Pat. Off

more competitive in its market.

After a financing arrangement has begun, an examination is made regularly every 60 to 90 days. The results of these examinations are furnished to you.

Here are some of the captions of the records usually kept on every account. These are all detailed in the working papers, and are carried forward as tabulations so that running comparisons and analyses can readily be made.

Comparative condition of accounts held

Comparative statement of working capital

Statement of changes in working capital

Comparative statement of profit and loss

Listing of accounts verified

Summary of aging of total accounts receivable outstanding

Examination of purchase orders

Analysis of reserve for bad debts

Analysis of accounts receivable control account

Inventories

Cash examination—analysis of exchange of clearing account

Analysis of cash receipts and disbursements

Aging of trade accounts payable Accrued taxes

Machinery, equipment and reserve for depreciation

Analysis of the surplus accounts (earned and capital)

A case example

To illustrate the use of this type of credit, let's refer to an example. Although over-simplified, this example is typical of many firms that are profitably cashing their receivables.

Our example is a manufacturer, Company "A," whose total capital is \$100,000, all in cash.

Company "A" has just received an order that will result in gross billing of \$125,000. To complete shipment it finds it has to buy \$50,000 in materials. This the firm does on credit terms of 30 days. The labor involved in fabricating a product from these materials totals, let us say, \$50,000, and must of

course be paid for in cash. Let us assume the production cycle is 30 days, and that trade practices necessitate that Company "A" grant 30-day terms to its customers.

Therefore, at the end of the first 30 days, company "A" by having paid out \$50,000, for materials that will have to be paid promptly, and \$50,000 for labor, finds it has expended its entire capital of \$100,000.

Company "A" will not receive payment of the \$125,000 billing price for another 30 days. Even though it could obtain more materials, it does not have the cash necessary to pay for the labor involved in fabricating these materials. As a result, this company faces the prospect of limiting its production program to one such article, or group of articles, as the



ABOUT
THE
AUTHOR

Howard M. Baltimore is an assistant vice president in the installment and accounts receivable division of Walter E. Heller & Company, Chicago, the nation's largest exclusive commercial financing firm. A veteran of more than 20 years' experience in the specialized financing field, Mr. Baltimore joined Heller in 1945.

case may be, every 60 days, or six such articles or groups of articles during one year. The annual sales would therefore total \$750,000. And the gross profit would be \$150,000.

On the other hand, if this same manufacturing firm had arranged to cash its receivables by either factoring them or borrowing against them, it would at the end of the first 30 days have created an account receivable in the amount of \$125,000. Against this the firm could realize from the finance company an advance of, say, 80% or \$100,000.

Thus Company "A" would have available sufficient funds to pay for the labor and materials required to produce another article or group of articles during the ensuing 30 days. This process could be repeated regularly, and the result would be

to reduce the cycle of the cash flow from 60 days to 30 days. Therefore, Company "A" could complete 12 \$125,000 orders per year, resulting in sales of \$1,500,000, instead of \$750,000, and the gross profit would be \$300,000, instead of \$150,000.

In this example the results were beneficial. However, there are instances where commercial financing is *not* a cure for a shortage of liquid working capital. If a company is losing money due to faulty operations, unless management can eliminate such losses and reverse the losing trend, no benefit can be gained through the financing of receivables.

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You may say: "Accounts receivable financing is basically sound, but it's too expensive." However, if you consider the cost in the light of the function performed and the flexibility to accommodate clients in sore need of funds, the rates are not high.

The charge has two components: interest and cost of services.

The greater portion of these charges is necessitated by the considerable servicing required on each account: periodic examinations and the day-to-day servicing of the client's accounts receivables. In most cases, the factor's net profit is less than one-half of one per cent of the total volume of business done

It should be remembered also that this type of financing charge is based on the actual time the money is in use. There is no accumulation of idle funds to pay off a loan at the end of its term, or a necessity to maintain a reserve which is unavailable as a frozen deposit balance. Borrowing rises and falls with need; when that need diminishes, borrowing can be immediately curtailed.

The good commercial financing company realizes that its profits and its success are measured by the success of its clients. Every effort is made to keep charges at a minimum, to watch operating costs, to ensure a reasonable return on employed capital, to keep competitive, and to keep the client in a good profit position.

To refer again to Company "A," this manufacturer would have been able to double his production as well as his gross profit by financing



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1957's dollar: **HOW TIGHT?**

Experts say there is no end in sight for the tight money market. But they disagree as to how severe will be the dollar shortage in 1957. Some authorities claim that although corporate investment in new plants and equipment will increase, little will be added to inventories, resulting in a possible net decrease in investment spending-and thus a slight softening of money shortage conditions. On the other hand, some experts say that recent developments in the Near East, for example, will force an even tighter money supply next year. Regardless of who's right, don't expect to see your banker dusting off his welcome mat in the near future.

his receivables. Assume that Company "A" paid \$13,000 as a charge for the financing described. A cost of \$13,000, if it contributes to an increased gross profit of \$150,000, is not unreasonable. In this example the average investment of the commercial financing company during a 12-month period would have been \$100,000. If the cost were \$13,000 for financing this \$100,000 for a period of a year, the per annum rate of return to the commercial financing company would have been 13%. On the surface this may seem high. But the important point is the advantages Company "A" received in the form of increased profits.

How factoring can pay for itself

In many instances commercial financing does not add anything to the cost the borrower has in doing business. This is true because the accelerated cash flow accomplished by this form of financing enables the borrower to take advantage of cash discounts on his own purchases. These discounts can pay a good portion or even all of the costs of financing. Many times the borrower's own accounts payable improve to the point where he is able to increase his lines of credit as well as enjoy more favorable relation-

ships with his suppliers. Then too, he can often avail himself of favorable purchases due to his improved cash position, all of which adds up to increased volumes and larger gross profits.

To illustrate how this can work, let's refer to an actual case history.

The company enjoyed complete confidence of its local bank and was borrowing from the bank on its receivables. However, in order to meet competition it was necessary to offer April 10th datings on sales generated during the months of November through February. Although these dating accounts were all to large, well-rated companies, the bank simply could not exceed its own legal loan limits to handle the increased outstandings resulting from the very necessary dating pro-

Additionally, the client required inventory loans in order to evenly distribute its production during the slack selling season. This further increased the need for funds considerably in excess of the bank's

The commercial financing firm was able to help by granting inventory loans on goods stored in a field warehouse. The loan was doubly secured inasmuch as noncancellable orders were available on this very inventory. In addition to this service, the commercial financing firm made available substantial sums on the receivables, on a revolving basis.

The end result is stated in the words of the client himself:

The first seven months we have been able to take discounts of \$10,-240.15 as compared with approximately \$7,000 for the entire preceding year. Our profits of \$53,636.63 net before taxes for this first seven months of our year are the best in our history and reflect the efficient operation we have been able to maintain as a result of having adequate working capital through . . . percentage loans on finished inventory.'

Thus, it is not the bare cost of the funds to the borrower that is of primary importance to him, any more than the bare cost of any other commodity or service is the sole determining factor in the success of the business using it. The measuring stick should be: Are the benefits worth it? m/m

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(Circle 105 for more information)

Inventory

(Continued from page 29)

cisions on the economy of inven-

These effects may sometimes be obscured. For example, one large company decentralized a large part of its operations. The decentralization, as an incidental measure, provided that each local manager control his own supplies. The result of this decision was that each manager tended to *duplicate*, in his own inventory supplies, items that were carried in other divisions. This had the effect of multiplying reserve supplies by the number of divisions.

Fortunately, this problem could be handled by a very simple control system which provided for centralized knowledge of the existence of supplies, and interdivision shipment when necessary. It does serve to illustrate, however, the necessity for recognizing inventory problems when making major strategic decisions.

Figure 3 also shows some specific actions which the executive can take to improve inventory economy.

Summary and conclusions

The classification of inventory management problems into *strategic*, *tactical*, and *technical* is valuable in reducing the complexity of inventory problems. The extent to which you can apply this concept in your own inventory management problem depends, of course, on your position and responsibilities in the organization.

At the very least, any management man can use the classification of inventory responsibilities to help him to define his own responsibility for action in connection with inventory, and also for the provision of information on which others can base their action.

This basic concept is most useful to the top level executive who has the full responsibility for planning, organizing, and directing the operation of the business. Description of inventory management responsibility in these terms will help the executive to define the true relationships between operating and marketing *decisions*, and inventory cost. It also helps to fix the *responsibility* for inventory cost properly at all levels in his organization. m/m

3 STRATEGIC INVENTORY MANAGEMENT

Consider properly the effects upon inventories when making major, top management decisions.

Primary operating conditions.
Type of business Availability of Capital
Nature of market Method of Distribution
Material Sources
, marchar occurred
Product Location of Operations Processes Required Plant Layout Available Space Location of Stores
Organization Available Personnel Systems Effectiveness of Controllership Expediting Costs

Management Action

Arrange operations to make maximum use of inventory. For example:

- 1. Combine two or more stores or warehouse inventories.
- 2. Keep a major portion of the inventory in a low-cost, flexible form.
- 3. Keep the number of locations where an item is stored in any form to a minimum.
- 4. Plan standardization of items and interchangeability of parts to minimize the number of items needed.

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Electronics for banks

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Consideration is given to concepts influencing both the machine manufacturers and bankers in the development of such systems, progress to date and pertinent problems which lie ahead in this area.

For a free copy of the booklet, circle number 197 on the Reader Service Card

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Introduce computer at reduced price

A medium scale electronic computer system, Elecom 125, designed for general business has been introduced by Underwood Corp. According to the manufacturer this system is capable of a daily work output comparing it favorably with computers costing five or six times more.

The system consists of a processor and computer. The processor sorts, collates, separates and categorizes data, relieving the computer of these routine operations. It performs arithmetic calculations, updating and summary compilations. These two components can operate together or independently, either simultaneously or one at a time.

The Elecom made its public

debut on election night when it predicted the outcome of the presidential race for the ABC network television audience.



Device eliminates invoice errors

A device has been announced which makes it possible to obtain sales reports automatically with the preparation of the original invoice. The new unit, called an Intercoupler, directly connects an IBM card punch to a Burroughs billing machine, eliminating the cost and delay of manual keypunching and card verification.

With the Intercoupler, a punched card is automatically produced for each item on the invoice. Because analysis is based on cards identical to the original invoice, several sources of possible error are eliminated. The results of both multiplication and addition operations of the billing machine appear on the cards and may be cross checked by IBM equipment for purposes of reconciliation.

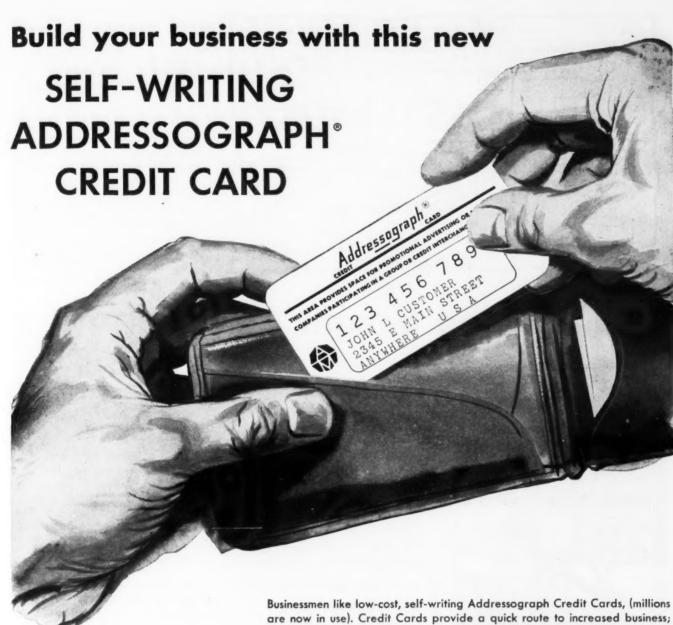
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New card converter

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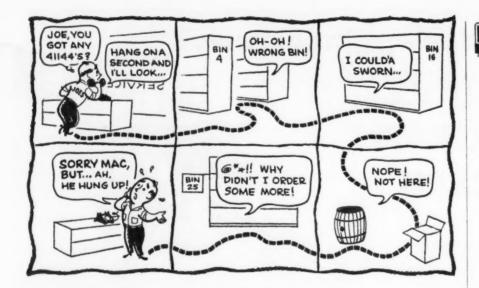
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An electronic bank bookkeeping machine now makes possible automatic pickup of old account balances on conventional bank forms. Called the Post-Tronic, this machine will enable banks to establish a degree of accuracy in checking account bookkeeping without previous time-consuming and costly duplication of effort.

Equipped with an electronic reading and recording mechanism, the machine automatically



"stores" a depositor's checking account balance on conventional-type monthly statements in the form of invisible magnetic symbols. As a result, an incorrect pickup of a depositor's balance through an operator's mistake cannot occur.

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A unique feature of the Post-Tronic is that it provides the speed of electronics and at the same time preserves time-tested advantages of standard printed Accounting forms records. posted by the machine are identical in appearance with those printed by conventional machines and there is never any need to translate electronic "language" or symbols.

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It helps to have an outsider's view of what you're doing. This article provides such a view. For his own country's management men, a British writer interprets America's democratic approach to management.

How "democratic" leadership in the U.S. is building better managers

EDITOR'S NOTE: This article is condensed from "Business" magazine, one of the leading management publications in Great Britain. The author, M. Brown, is a noted British lecturer who recently toured the United States, particularly the Middle West, on behalf of the magazine. His article highlights the impressions he received as to the effectiveness of the new approach to management in America.

Here in America the problem of finding and training industrial managers is widely regarded as one of the nation's top problems.

To find the answer to these problems, millions of dollars are being poured by industry annually into the search for new patterns of supervision, new management practices and new approaches to human relations. Social scientists, settled in universities up and down the country, and supported by funds from many different sources, are patiently gathering material about human behavior. In recent years much of this work has spread into the field of "leadership."

I have just been in the industrial Middle West, and as I toured round talking to social research workers, managers, union representatives and educationalists, I began to see some of the revolutionary implications of the new concepts about leadership, and also to understand some of the reasons why a small part of American industry is beginning to lend an attentive ear to what the sociologists are telling them.

Whether I was visiting a factory, the headquarters of a trade union, or an industrial relations department of a university, the same problems were discussed. People were talking about or planning courses for educating leaders. And trade union leaders were as acutely aware of the problems as management.

Under the pressures of expansion and social change, leadership is increasingly conceived as a function which may pass to different members of a group, according to the needs of the moment. The most important work of an official or formal leader (as, for example, an industrial manager or supervisor) is providing the right kind of atmosphere, or "psychological climate," so that the followers will gradually become willing and able to make their own decisions about matters which concern them. Only if decisions are delegated in this way can senior executives give adequate time to the new complications of industrial life.

I have only enough space to quote a tiny fraction of the evidence which is leading to the formulation of this new approach, but on my tour I became aware that two very different disciplines,

group dynamics and individual psychotherapy, were each contributing evidence leading to these same conclusions.

I talked first to the members of the Survey Research Centre at Ann Arbor, Michigan. Their researches into what makes groups "tick" and the significance of the leader's role have spread into many fields of social activity-boys' clubs and camps, children's education, vacation training groups and women's political organizations. But some of their most significant findings have concerned management behavior in industry and commerce. They have studied groups with a high productivity and groups with a low productivity doing identical work, first among rail track gangs and then among office workers in a large insurance company; they naturally found that the main common factor distinguishing the more productive from the less productive groups was the difference in their supervision. Supervisors of the former saw their job as being one of giving attention to their workers' problems and of consulting them, while supervisors of the latter were more concerned about checking up on the workers and getting the work done.

In another survey it was found that workers were favorably disposed towards management rather than towards the union in those departments where the supervisor involved them in decision-making, and the union shop steward did not. In other departments where supervisors and shop stewards were reversing these consultative roles, the union was better liked than management.

In a textile factory, productivity during a technological change-over was abnormally low in groups where no consultation took place and highest in those groups who were given the responsibility for making some decisions about the change-over process.

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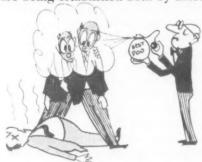
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Meanwhile, from quite another source the same kind of evidence is being collected. At the Counselling Centre at the University of Chicago I talked to Dr. Carl Rogers. He and his staff are working with individuals, not groups.

Dr. Rogers' 25 years' experience as a counsellor suggests that the most effective leaders are those who create an atmosphere of trust and acceptance in which the individual can develop in this way.

This approach to leadership needs to be learned. The establishment of this atmosphere is a conscious skill which needs to be practised. But it involves much more than this. It often calls for re-examination by the leader of his own fundamental concepts about people. Can he be sincere in his attitude of trust and acceptance? Does he know the effect his own actions are having on other people? So training and workshops are being established both by those



The most important work of a manager is providing the right atmosphere so that the followers will gradually become willing and able to make their own decisions.

who are primarily concerned with the behavior of groups and by those who approach the subject from the standpoint of the individual.

Perhaps the best known of these courses, based on the group approach is run by the National Training Laboratory in close collaboration with the Ann Arbor Social Research Centre. Two groups of 125 are chosen to attend a threeweeks Laboratory in Group Development at Bethel in Maine. Here, working together in a group each individual has an opportunity to see the effect he has on others, and learn the skills of democratic leadership by practising them. Many past trainees are now attempting to carry this new approach into their everyday work.

Some industrial leaders find it hard to apply their new skills on their return to the normal hierarchy of power. One managing director of a chemical works, for example, tried to involve his managers of departments in the policy making decisions of the plant. He found them very reluctant to play this responsible role, preferring their old position of dependency and subordination. His solution has been to send the managers in groups to Bethel each year over the past five years, and he is introducing his new methods of management as the individual managers come back with a greater understanding of, and sympathy for, what he is attempting to accomplish.

The Counselling Centre at Chicago has started a similar kind of training based on its work with individuals. Local managers have met in a weekly seminar and have learned at first hand how to act as "democratic" leaders.

Dr. Rogers told me that there was initial bewilderment and some resistance to this new way of teaching, but that at the end of the seminar the group was beginning to understand the approach. One member who endeavored to try out the new approach was a plant superintendent in charge of a factory with a total strength of 325 men and women. He set out to support the foremen in the use of



He tried to establish an atmosphere of warm acceptance and understanding.

their own capacities and to develop a strong sense of group cohesion.

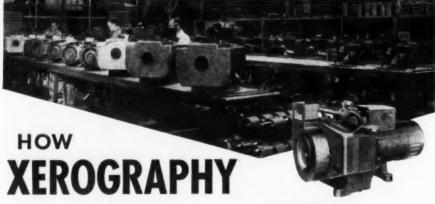
Face-to-face contacts

Through face-to-face contacts with individuals and small groups, he tried to establish an atmosphere of warm acceptance and understanding for their problems, giving openly and freely of his own ideas but not making decisions for the foremen. His functions varied—sometimes a counsellor, sometimes an accumulator of facts, sometimes a channel of communication, sometimes a channel of authority through which the foremen could obtain sanction for actions outside their own area of authority.

Thinking with a foreman over a problem, he often received such a comment as: "Here I go answering my own questions. I keep on asking a question and then answering it myself." As a result of this leadership, all the foremen grew more mature, and a formerly sulky and stubborn man became one of the most articulate and soundest thinking organizers in the factory.

Moreover, a cohesive, effective group developed. The factory began to operate more smoothly, efficiently and profitably. Many leadership functions were taken over by the group and the plant manager was free to concentrate where he could be most helpful.

The release from anxieties and tensions freed the group to put their full energies into productive channels. The plant manager says that he had "to scoot to keep up." The men "worked harder, accom-



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plished more," and all "with a special quality of creativeness."

This development took time and was fraught with many difficulties. Some foremen, used to dependency, felt at first very lost. Some other executives resented this threat to their traditional authority. As one executive said, "Why, you're dreaming—you actually let them tell you what they're going to do."

Nevertheless, one year later the plant manager had demonstrated that "group-centered leadership" resulted in higher production, reduced costs, higher quality of production, and better long range planning.

Another outstanding teacher of democratic management in the Detroit area, Dr. Norman Maier of the University of Michigan, emphasized the same experiences—that supervisors using these newer methods have saved their companies considerable sums of money.

Selection for training

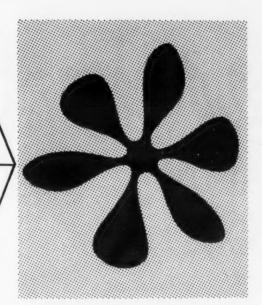
Dr. Maier also had some interesting views on the selection of persons for training in democratic leadership. He said: "So far we have tended to pick people who are good mixers, who get on well with others. These people are not necessarily the best material for training in those new skills." In support of his statement he said he had recently trained two groups, one a group of salesmen already skilled at approaching people and the other a group of engineers. The latter were at first suspicious, asking what new tricks he was trying to put across. But once convinced he was genuine, they learned quickly and well. The salesmen tended to regard his training as one more method of manipulating people, and learned much less as a result.

So a democratic leader may need a different combination of potential traits from the traditional authoritarian leader. Intelligence is important, and so is flexibility. Social graces and easy manners may even, by contrast, prove a hindrance.

I have said that for our age, this is a "new" approach to leadership. But although the research is new, did not a very old Chinese philosopher say: "But of a good leader who talks little when his work is done, his aim fulfilled, they will all say, we did this ourselves." m/m

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Taxes How they affect plant site selection

by Leonard C. Yaseen



EDITOR'S NOTE: This factual material is taken from a newly published book titled "Plant Location." The author, Leonard C. Yaseen, is a senior partner of Fantus Factory Locating Service. His book constitutes a broad guide to plant site selection. It covers the many diverse factors that must be examined before making a decision-from transportation and labor availability to safety from enemy attack.

PLANT LOCATION. Leonard C. Yaseen. American Research Council, Larchmont, N. Y. 1956. 226 pp. \$10.

Few industries have relocated their plants solely because of unfavorable state taxes—it is rather the cumulative effect of this and other high costs that prompt a manufacturer to consider relocation.

In a survey conducted by Burkhead and Steels and printed in the Journal of Business of the University of Chicago, July 1950, it was found that taxes in approximately half of the manufacturing corporations studied in the state of Pennsylvania amounted to 1% or more of the total net income-and in one out of every seven corporations state taxes amounted to 2% or more of the total income. In the latter category especially, companies with other undue cost factors, workmen's compensation insurance rates, high local taxes or burdensome labor costs might be prompted to consider relocation.

The Tax Foundation of New York stated in their booklet, Facts and Figures, as early as 1951, . . . the states' expanded activities left them short of revenue requirements and they turned more and more to the federal government for aid. At the beginning of the decade the states were receiving about \$645 million in such aid. By 1949, this federal aid had increased nearly two-fold.

"Thus state and local taxpayers were doubly burdened. To meet the states' demands for more aid, federal taxes were increased. Helped by this federal aid, the states' programs were enlarged still more, necessitating demands for still larger state levies to support them.

Perhaps most important in any discussion of state taxes is the net debt now being incurred by many states, which eventually cannot help but be detrimental to its industry and other business interests. At the close of fiscal 1951, the total state debt rose to an unprecedented high of \$7,824,000,000.

Since the net debt of a state is at least a partial indication of future revenue needs, the finances of a state should be investigated prior to plant location. The chart below shows the trend in state debt.

NET LONG-TERM DEBT OF STATE GOVERNMENTS

TOTAL AND PER CAPITA End of Fiscal Years 1942, 1946, and 1953

	NET LONG	TERM DEBT (TH	PER CAPITA (a)			
STATE	1942	1946	1953	1942	1946	1953
Total	\$2,563,493	\$1,727,107	\$6,296,320	\$19.26	\$12.41	\$39.99
Alabama	66,700(b)	45,409(b)	56,267(ъ)	22.68	15.60	18.07
Arizona	3,483	2,505	2,263	6.65	4.07	2.43
Arkansas	148,419	129,762	111,196	75.07	72.21	58.25
California	144,749	88,497	344,417	18.71	9.26	28.25
Colorado	23,686	18,924	13,214	21.28	15.73	9.35
Connecticut	30,213	9,921	80,200	16.86	5.21	37.10
Delaware	5,717	4,535	110,309	20.49	15.17	308.13
Florida	4,465	4,017	65,204	2.08	1.65	19.45
Georgia	26,163	66	66,026	8.16	.02	18.42
Idaho	2,548(b)	234	1,088	5.33	.46	1.80
Illinois	142,573	103,356	347,696	17.70	12.67	38.62
Indiana	7,214	4,471	18,604	2.06	1.21	4.50
Iowa	2,941	1,219	30,649	1.21	.49	11.77
Kansas	14,544	8,713	3,417	8.26	4.83	1.70
Kentucky	6,221	2,929	9,751	2.22	1.06	3.29
Louisiana	178,005(ъ)	148,233	199,277	69.92	57.99	69.10
Maine	26,811	16.813	63,726	31.96	20.21	69.72
Maryland	50,104(ъ)	30,135	176,898	25.08	13.61	69.62
Massachusetts	76,631(b)	54,216	409,382	17.54	12.06	83.55
Michigan	15,493	19,356	345,612	2.79	3.30	50.44
	78,925	53,557	106,163	29.65	19.59	34.77
Minnesota	78,441	44,105	75,713	35.49	21.37	34.68
Mississippi Missouri	84,710(b)	53,146	14,557	22.12	14.19	3.55
	12,004	9,004	34,888	23.17	17.52	56.82
Montana	1,384	850	3.001	1.12	.68	2.23
Nebraska				4.28	.00	4.08
Nevada	587 16,389	10,721	27,037	34.07	21.70	51.30
New Hampshire				13.70	8.39	
New Jersey	58,889	37,667	402,555	53.20	36.80	78.30
New Mexico	26,707	20,647	25,681	39.81	28.72	33.88
New York	517,595	384,784	469,878			
North Carolina	108,329	33,570	202,503	30.35	9.06	48.30
North Dakota	4,027	6	8,551	6.91	.01	13.77
Ohio	6,432(b)	3,352(b)	474,331	.92	.45	56.68
Oklahoma	53,280	17,070	115,941	24.05	8.02	51.51
Oregon	14,359	5,009	98,726	12.97	3.74	61.63
Pennsylvania	168,964	89,307	930,635	17.41	9.05	87.33
Rhode Island	23,946	20,517	49,396	32.01	26.65	60.46
South Carolina	84,130	67,521	128,772	41.92	34.88	58.67
South Dakota	22,898	18,236	3,431	38.88	31.01	5.22
Tennessec	83,968	70,029	104,760	28.57	22.78	31.47
Texas	17,786(b)	11,108(b)	89,817(b)	2.65	1.54	10.82
Utah	2,590	293	1,095	4.50	.46	1.49
Vermont	6,204	2,236	4,350	18.09	6.54	11.54
Virginia	19,258	6,032	27,496	6.34	1.88	7.75
Washington	11,925	6,161	188,347	6.27	2.69	76.01
West Virginia	74,115	62,236	242,874	40.48	34.08	125.39
Wisconsin	5,403	3,731	5,419	1.77	1.18	1.54
Wyoming	3,568(b)	2,901(ь)	4,367(b)	14.22	11.42	14.27

(a) Based on estimated population residing in the United States, excluding armed forces overseas, as of July 1 of each calendar year.

(b) Fiscal year ending in preceding

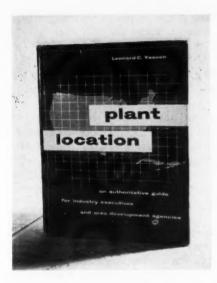
Source: Department of Commerce.

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Kansa Nebra

West



Because of huge budgetary increases, the various states have sought new forms of taxation and have increased existing sales, property, alcoholic beverage, and other taxes. As of October 1955, 16 states assessed no corporation income tax and 32 other states plus the District of Columbia imposed a tax ranging from 1% to 8%. Because of differences in application of the income tax and the wide variation in regulations, it is difficult, if not completely misleading, to compare

STATE AND LOCAL TAXES AS A PERCENT OF INCOME PAYMENTS: 1952-1953

INCOME

STATES	STATE TAXES (\$ 000)	LOCAL TAXES (\$ 000)	TOTAL TAXES (\$ 000)	PAYMENTS IN PRIOR CALENDAR YEAR (\$ MILLIONS)	PERCEN! OF TAXES OVER INCOME
48 States	\$11,750,149	\$12,686,955	\$24,437,105	\$253,589	09.63
North Dakota	69,162	49,938	.119,100	734	16.22
Louisiana	340,221	120,652	460,873	3,396	13.57
New Mexico	96,271	27,714	123,985	965	12.84
Florida	269,076	246,545	515,621	4,088	12.61
Minnesota	274,256	282,717	556,973	4,505	12.36
Wyoming	33,134	27,381	60,515	495	12.22
Arizona	87,974	60,223	148,197	1,287	11.51
Oklahoma	223,912	110,858	334,770	2,910	11.50
Mississippi	124,177	79,383	203,560	1,778	11.44
New Hampshire	32,948	60,801	93,749	823	11.39
Colorado	128,398	135,314	263,712	2,316	11.38
Nevada	20,336	25,737	46,073	405	11.37
California	1,236,892	1,350,551	2,587,443	23,146	11.17
Idaho	46,970	50,583	97,553	874	11.16
Iowa	189,289	259,440	448,729	4,087	10.97
Vermont	29,275	25,146	54,421	497	10.94
Wisconsin	279,454	357,173	636,627	5,837	10.90
South Carolina	175,846	77,049	252,895	2,341	10.80
Washington	209,050	183,732	481,782	4,466	10.78
Maine	64,027	63,871	127,898	1,203	10.63
New York	1,188,962	2,067,367	3,256,329	30,935	10.52
Massachusetts	340,679	539,849	880,528	8,385	10.50
Utah	57,783	53,731	111,514	1,069	10.43
North Carolina	315,083	142,112	457,195	4,383	10.43
Oregon	146,310	140,882	287,192	2,763	10.39
Montana	49,190	53,856	103,046	1,003	10.27
Georgia	234,909	169,383	404,292	3,998	10.11
Michigan	649,241	539,418	1,188,659	12,172	09.76
Kansas	153,708	171,067	324,775	3,400	09.55
Arkansas	111,374	58,405	169,779	1,785	09.51
Alabama	182,364	105,890	288,254	3,089	09.33
Nebraska	74,215	125,523	199,738	2,147	09.30
Texas	536,532	544,733	1,081,265	11,887	09.09
Tennessee	196,585	134,022	330,607	3,669	09.01
Indiana	320,409	299,625	620,034	6,917	08.96
New Jersey	226,330	606,809	833,139	9,996	08.33
Virginia	227,024	154,897	381,921	4,624	08.25
Maryland	186,402	176,154	362,556	4,449	08.14
Kentucky	149,521	119,869	269,390	3,311	08.13
West Virginia	134,418	60,920	195,338	2,404	08.12
Connecticut	156,208	183,728	339,936	4,375	07.76
Ohio	534,587	640,674	1,175,261	15,378	07 64
Pennsylvania	656,693	716,488	1,373,181	18,245	07.52
Illinois	537,175	800,730	1,337,905	17,681	07.56
Missouri	219,829	249,950	469,779	6,420	07.31
Rhode Island	60,128	38,224	98,352	1,352	07.27
Delaware	37,288	14,378	51,666	764	06.76





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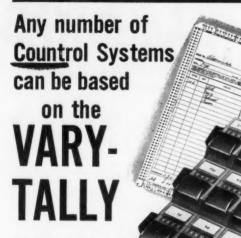
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simple tax rates. Some states employ a formula for the apportionment of income, some do not. Some states permit deduction of Federal income tax, some do not, etc.

Property taxes, one of the oldest forms of taxation and still a principal source of revenue, are levied by every community.

Variation appears in actual rates; in the ratio of assessment to actual value; in distinctions between real, personal, tangible and intangible property; in the existence of special taxes on corporate securities or on specified types of business; and in the exemptions allowed. These variations indicate the necessity of ascertaining liability to requirements of property taxing procedures.

The general property tax rate is the total of all school, county, township and state levies assessed against the property. Since most property valuations for assessment purposes are made on a local level, municipal or county practices are very important when estimating the total property tax to which a new plant might be subject.

With full realization that tax rates are not a measure of the type of service rendered by a municipality, data on the cities listed on page 58 in a chart prepared by the National Municipal League (National Municipal Review, January 1955), reveals sizable variations not only in tax rates but in local assessment practices that change the effective rate paid. Variations in ex-

STOCK TRANS-

SALES

STATE BUSINESS TAXES

FRANCHISE TAX

SIAIE	100	IAA	PER IMA	IAA	100
Alabama	Yes	Yes	Yes	Yes	Yes
Arizona	No	Yes	No	Yes	No
Arkansas	Yes	Yes	No	Yes	Yes
California	Yes	Yes	No	Yes	Yes
Colorado	Yes	Yes	No	Yes	Yes
Connecticut	Yes	Yes	No	Yes	Yes
Delaware	Yes	No	No	Yes	No
D. C.	Yes	Yes	No	Yes	Yes
Florida	Yes	No	Yes	Yes	Yes
Georgia	Yes	Yes	No	Yes	Yes
Idaho	Yes	Yes	No	No	No
Illinois	Yes	No	No	Yes	No
Indiana	No	No	No	Yes	No
Iowa	Yes	Yes	No	Yes	Yes
Kansas	Yes	Yes	Yes	Yes	Yes
Kentucky	Yes	Yes	No	No	No
Louisiana	Yes	Yes	No	Yes	Yes
Maine	Yes	No	No	Yes	Yes
Maryland	Yes	Yes	Yes	Yes	Yes
Massachusetts	Yes	Yes	Yes	No	No
Michigan	Yes	No	No	Yes	Yes
Minnesota	Yes	Yes	Yes	No	· No
Mississippi	Yes	Yes	Yes	Yes	Yes
Missouri	Yes	Yes	No	Yes	No
Montana	Yes	Yes	No	No	No
Nebraska	Yes	No	No	No	No
Vevada	No	No	No	No	No
New Hampshire	Yes	No	No	No	No
New Jersey	Yes	No	No	No	No
New Mexico	Yes	Yes	No	Yes	Yes
New York	Yes	Yes	Yes	No	No
North Carolina	Yes	Yes	No	Yes	Yes
North Dakota	No	Yes	No	Yes	Yes
Ohio	Yes	No	No	Yes	Yes
Oklahoma	Yes	Yes	Yes	Yes	Yes
Oregon	Yes	Yes	No	No	No
Pennsylvania	Yes	Yes	Yes	Yes	Yes
Rhode Island	Yes	Yes	No	Yes	Yes
South Carolina	Yes	Yes	Yes	Yes	Yes
South Dakota	No	No	No	Yes	Yes
	Yes	Yes	Yes	Yes	Yes
Tennessee	Yes	No	Yes	No	No
Texas		Yes			
Utah	Yes	Yes	No	Yes Yes	Yes
Vermont	No		No		No
Virginia	Yes	Yes	Yes	No	No
Washington	Yes	No	Yes	Yes	Yes
West Virginia	Yes	No	No	Yes	Yes
Wisconsin	No	Yes	No	No	No
Wyoming	Yes	No	No	Yes	Yes

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STATE CORPORATION INCOME TAX RATES

STATE	CORPORATION NET INCOME TAX RATES	OF FEDERAL INCOME TAX
Alabama	3%	Allowed
Arizona	Graduated from 1% on first \$1,000	
	to 5% on all above \$7,000	Allowed
Arkansas	Graduated from 1% on first \$3,000	
	to 5% on all above \$25,000	Not Allowed
California ¹	4%	Not Allowed
Colorado ²	5%	Allowed
Connecticu: ^a	3%	Not Allowed
District of Colum	bia 5%	Not Allowed
Georgia	4%	Not Allowed
Idaho ¹	Graduated from 1.5% on first \$1,000	
	to 8% on all above \$5,000	Allowed
Iowa	3%	Allowed
Kansas	2%	Allowed
Kentucky	4.5%	Allowed
Louisiana	4%	Allowed
Maryland ⁵	4.5%	Not Allowed
Massachusetts ^d	6.765%	Not Allowed
Minnesota ⁷	6%	Allowed
Mississippis	Graduated from 2% on first \$5,000	
	to 6% on all above \$25,000	Not Allowed
Missouri	20%	Allowed
Montana ⁹	3%	Allowed
New Mexico	2%	Allowed
New York ¹⁰	5.5%	Not Allowed
North Carolina	6%	Not Allowed
North Dakota	Graduated from 3% on first \$3,000	
	to 6% on all above \$15,000	Allowed
Oklahoma	4%	Allowed
Oregon ¹¹	8%	Not Allowed
Pennsylvania	5%	Not Allowed
Rhode Island ¹²	4%	Not Allowed
South Carolina ¹³	5%	Not Allowed
Tennessee ¹⁴	3.75%	Not Allowed
Utah ¹⁵	4%	Allowed
Vermont ¹⁶	5%	Not Allowed
Virginia	5%	Not Allowed
Wisconsin	Graduated from 2% on first \$1,000	
	to 7% on all above \$6,000	Allowed

California: Financial corporations other than banks are allowed a limited offset for personal property taxes and license fees. Minimum

²Colorado: For the calendar year 1955 and fiscal years beginning in

355, the tax is reduced 20%.

3 Connecticut: 334% for income years beginning in 1955 and 1956.

Or, if tax yield is greater, 1½ (1.9 for 1955 and 1956) mills per dollar of capital stock, surplus and indebtedness. Minimum tax \$15 (\$20 for and 1956).

1955 and 1956).

4 Idaho: Increased by 7½% for taxable years beginning after December 31, 1954. Surtax expires December 31, 1956.

5 Maryland: Domestic corporations are allowed credit for so much of their franchise taxes as are in excess of \$25.

6 Massachusetts: All corporations pay additional tax on corporate excess. Domestic property holding and property dealing corporations, not less than 1/20 of 1% of gross receipts.

7 Minnesota: A property and payroll credit is allowed against the tax equal to 10% of the average of the ratios of tangible property and payroll in the state, applicable to corporations. Minimum tax, \$10.

A surtax equal to 5% of the above rate and a tax of \$5 per year are imposed for years beginning after 1948 and before 1959. An additional tax of 1% for two taxable years beginning Dec. 1, 1954.

8 Mississippi: 14% surtax from April 1, 1955, to June 30, 1956.

9 Montana: Minimum tax, \$5.

10 New York: Corporations are subject to a 5½% tax on net income or a tax on three alternative bases, whichever produces the greatest tax.

New York: Corporations are subject to a 5½% tax on net income or a tax on three alternative bases, whichever produces the greatest tax.
 11 Oregon: Utilities, 4%. Mercantile, manufacturing and business corporations and utilities are allowed a personal property tax credit up to 50% of the excise tax. Minimum tax, \$10.
 12 Rhode Island: 5% of net income from 1951 through 1955. Or 40¢ on each \$100 of corporate excess if tax yield is greater.
 14 South Carolina: For corporations, not less than 3% of the entire net income plus salaries and other compensation to elective and appointive officers and to any stockholder owning in excess of 5% of the issued capital stock, after deducting \$6,000 and any deficit for the year.
 14 Tennessee: Insurance companies are entitled to credits for gross premiums taxes paid. Fees paid by state banks for the use of the State Banking Department are credited. Corporations are also subject to the tax on dividends and interest.
 15 Utah: Corporations are subject to the 4% tax or a tax of not less

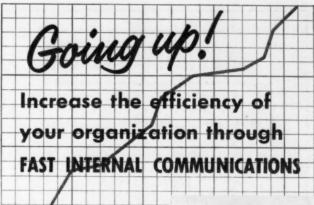
tax on dividends and interest.

15 Utah: Corporations are subject to the 4% tax or a tax of not less than 1/20 of 1% of the fair value of tangible property in the state, whichever is greater, but in no case less than \$10.

18 Vermont: Subject to reduction if there is sufficient surplus in the

general fund. Minimum tax, \$25

Source: Commerce Clearing House, Inc.



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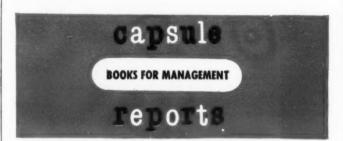
(Circle 169 for more information)

Municipal Assessments

CITY	1950 POPULATION	TOTAL ACTUAL TAX RATE AS LEVIED PER \$1000 ASSESSED VALUATION	REPORTED RATIO OF ASSESSED VALUE TO CURRENT MARKET VALUE (PER CENT)	ADJUSTED TAX RATE ON 100% BASIS OF ASSESSMENT
Atlanta, Ga.	331,314	\$47.75	28	\$13.37
Newark, N. J.	438,776	85.50	56	47.88
Buffalo, N. Y.	580,132	46.64	60	27.98
Milwaukee, Wis.	637,392	49.85	52	25.92
San Francisco, Calif.	775,357	68.50	50	34.25
Los Angeles, Calif.	1,970,358	67.40	50	33.70
Houston, Tex.	596,163	53.00	77	40.81
Baltimore, Md.	949,708	28.77	65	18.70
Cleveland, Ohio	914,808	31.30	50	15.65
Seattle, Wash.	467,591	52.51	24	12.60
Pittsburgh, Pa.	676,806	44.09	53	23.37
Philadelphia, Pa.	2,071,605	30.25	61	18.45
Washington, D. C.	802,178	21.64	75	16.23
Cincinnati, Ohio	503,998	27.80	50	13.90
Kansas City, Mo.	456,622	41.80	30	12.54
Worcester, Mass.	203,486	52.00	70	36.40
Jacksonville, Fla.	204,517	50.58	50	25.29

emption of homesteads also affect taxes paid on residential property.

The impact of specialized state and local taxation must be carefully analyzed by the investigator seeking a new plant location. Manufacturers, for example, who move a large volume of freight via motor carrier will be affected, to a varying degree, by the gasoline taxes. m/m



Union Strike Votes—Current Practice and Proposed Controls

Should the government conduct secret ballot strike votes? Legislation to provide this action has been repeatedly advocated by President Eisenhower. However, this extensive study concludes the president's claim that the proposed legislation will make union strike votes more democratic is fallacious, and in fact this control would limit free democratic union action. Surprisingly, the study reveals evidence contrary to the union detractors oft repeated claim that strike votes are far often less than fair. Among the more important conclusions are "Most local unions require that strikes be authorized by a majority vote of the membership in a secret hall of election" and, "the prevalence of secret strike votes in American unions is understated."

HERBERT S. PARNES, Associate Professor of Economics, Ohio State University, Industrial Relations Section, Department of Economics and Sociology, Princeton University. 141 Pages. \$3.00.

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MANAGEMENT METHODS

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(Circle 130 for more information)



Report from a silk-screen user:

"We cut costs 50%, increased output 25% with Du Pont Screen Process Film!"

If silk-screen printing enters into any phase of your business, it will pay you to investigate Du Pont Screen Process Film. This film gives *photographic* accuracy in reproducing art work, signs — even instrument dials where close tolerance is essential. It offers you substantial savings in time and labor as well.

Take the case of Grote Manufacturing Company's Grotelite Division, a leading producer of highway safety signs. They switched their screen printing operation from hand cutting of stencils to the photographic process using Screen Process Film. Here's what Plant Manager Paul G. Scully says: "Du Pont Screen Process Film immediately eliminated costly layouts, use of dies and hand cutting. It improved our product, too, at the same time. We cut the cost of our operation in half and increased production a full 25%!

"The film rewards us with 100% definition and is very easy to handle. We take a negative, reverse it for the positive and enlarge directly from the film. Elapsed time: less than a half hour. Formerly it took two hours! And because the silk is reusable, we can save up to \$10 per screen."

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Du Pont Screen Process Film is easy to use. First, the film is exposed either by projection, in a camera, or by contact. Next, the film is processed, and its vinyl backing is stripped dry. The stencil is now ready for printing—approximately twenty-four minutes after film exposure! Why not get all the facts about this time- and cost-saving method of screen printing? Just mail coupon for full details.



AFTER EASY PROCESSING, Du Pont Screen Process Film is ready to be attached to a silk screen. Vinyl backing is stripped dry...no solvents needed... and the finished stencil is ready for printing.

ess Film.

(Circle 173 for more information)

thought starters

Thought Starters deal with "practical solutions to administrative problems." The Editor invites contributions—which are paid for at our normal space rates.

LABOR

Forum technique seeks jobs for older women

A new program is designed to help older women qualify for jobs and to meet labor needs of employers.

The project is an Earning Opportunities Forum, a one-day meeting which brings together older women who need jobs, employers who are seeking workers, and community agencies that feel that their "mature citizens" have definite places in the economic world.

According to Alice K. Leopold, Assistant to the Secretary of Labor for Women's Affairs, this approach is unique in that it affords employers an opportunity to present their personnel requirements to the community. It also permits an open and objective evaluation of the needs and potentialities of older women job seekers, and at the same time, contributes to the economic well-being of the community.

Test projects of the Earning Opportunities Forum were held in Baltimore and Boston earlier this year. Their success prompted several other communities to ask for assistance in this connection.

EDUCATION

How to get more technicians: train teachers on the job

One way to relieve the shortage of technically trained men and women in industry is to make careers in science more attractive to high school students. A partial solution to this problem was achieved this summer when two high school science teachers joined Armstrong Cork Co. for eight weeks of research work.

Both men carried out specific research tasks suited to their specialties. One was drawn into the acoustics research program, the other investigated the preparation of print paint resins used in floor covering in the Chemistry Division.

The teachers found that this type

60

MANAGEMENT METHODS

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National's adding machine ...

Live keyboard* with keytouch adjustable to each operator!

Saves up to 50% hand motion—and effort! Never before have so many time-and-effort-saving features been placed on an adding machine.

Every key operates the motor! So you can now forget the motor bar! No more back-and-forth hand motion from keys to motor bar. Think of the time and effort this saves.

Keyboard is instantly adjustable to each operator's touch! No wonder operators are so enthusiastic about it. They do their work faster—with up to 50%

less effort. New operating advantages, quietness, beauty.

"LIVE" KEYBOARD with Adjustable Key-touch plus 8 other time-saving features combined only on the National Adding Machine: Automatic Clear Signal . . . Subtractions in red . . . Automatic Credit Balance in red . . . Automatic space-up of tape when total prints . . . Large Answer Dials . . . Easy-touch Key Action . . . Full-Visible Keyboard with Automatic Ciphers . . . Rugged-Duty Construction.

A National Adding Machine pays for itself with the time-and-effort it saves, then continues savings as yearly profit. One hour a day saved with this new National will, in the average office, repay 100% a year on the investment. See a demonstration, today, on your own work. Call the nearest National branch office or National dealer.

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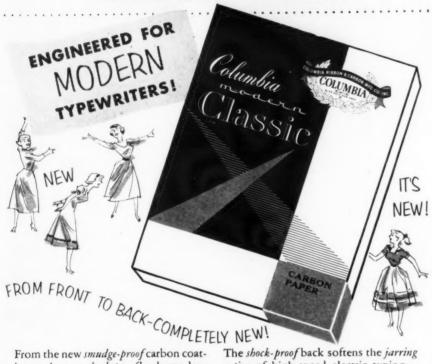
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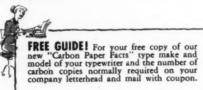


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With either electric typewriters or recent manual machines, modern Classic Carbon Paper produces a new *sharpness* of write and *uniformity* of appearance—truly the ultimate in carbon copies.

The scientifically formulated carbon coating is *deep dyed* to form a permanent bond with the paper stock fibers. The carbon is transferred *only* by impact of the type face to produce *permanent*, *smudge-proof* characters. Micro-blended for absolute smoothness, this new coating assures complete uniformity of upper and lower case characters.

The shock-proof back softens the jarring action of high-speed electric typing—the cause of unevenness produced by ordinary carbons. Only the exact amount of carbon necessary to create a sharp, full-bodied image is released. For carbon copies that you'd be proud to send to anyone, specify Modern Classic—the carbon paper designed for modern typewriters. Columbia Ribbon and Carbon Manufacturing Co., Glen Cove, N. Y.



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(Circle 108 for more information)

of industry-education cooperation permitted them to become more familiar with the problems faced in industry, and with the means taken to solve those problems. As an offshoot, they are better acquainted with industrial applications of the sciences they teach.

Armstrong believes that this sort of program pays off for companies too. It gives teachers an idea of what industry expects of technicians, who often enter work in industrial laboratories immediately after graduation from high school. This leads to more practical training of the pupils in their science classrooms. Also, it tends to stimulate interest in the sciences by making research work seem closer to the students, since their teachers have been directly involved.

Armstrong will continue hiring high school teachers for summer work as part of its broad program of industry-education cooperation. Included in the activities are visits to the company's facilities by secondary school students each spring; periodic college professor visitations; cooperation with a number of technical societies whose membership include students and teachers; and the company's participation in a program sponsored by the Manufacturers Association of Lancaster, and held in the company auditorium, for area students interested in science and engineering.

EXECUTIVE LITERATURE

New publications listed by A.M.A.

The 1956-57 edition of the American Management Association's Management Bookshelf, a complete catalogue of the association's publications, is now available to businessmen. The 44-page booklet contains the titles of more than 300 new publications plus a listing of several hundred out-of-date titles still available on a borrowing basis.

The publications deal with every conceivable phase of management operations, and range in construction from major research and special reports to individual papers of the several continuing series published by A.M.A. Also listed are special films and filmstrips.

For a free copy of the Management Bookshelf, circle number 193 on the Reader Service Card.

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More than a million credit checks a month...



but filing them this way is a snap



General Petroleum Corporation-the Socony-Mobil affiliate in the far west-cuts billing costs approximately 50% by photographing credit checks in a Recordak Microfilmer

In one minute the girl at the Recordak Microfilmer can file more than 300 credit checks on film.

This fast, low-cost operation allows many short cuts. Some, no doubt, might well be applied to your own routines.

Cuts paper work. Photographing the original Mobil credit checks eliminates the need for the carbon copies formerly kept as the office record. (The originals, as before, are returned to the customer with his bill.)

Handling only one paper record for every purchaseinstead of two-saves time all along the line. For example, four days a month were formerly spent cleaning out drawers and labeling storage boxes.

Turns file space into office space. A year's supply of

credit checks-on Recordak Microfilm-are now filed at the finger tips in four file drawers instead of in 1800 large boxes. A space saving of at least 98%.

Eliminates "can't find's." Now, when customers ask to see past records . . . they can be located in a matter of minutes, and viewed-or duplicated-in a Recordak Film Reader. Since the adoption of Recordak Microfilming there hasn't been a single case of a ticket not being easily found.

Permits centralized accounting. Branch offices now forward credit checks to home office where dual microfilm copies are made simultaneously—one set for branch. Despite a three times' increase in ticket volume in recent years same staff easily handles the job! "Recordak" is a trademark

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Gentlemen: Please send free copy of "Short Cuts That Save Millions"

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DECEMBER 1956

SAVE MILLIONS" This valuable free booklet shows how Recordak Microfilming is cutting costs for over 100 different types of business . . . thousands of concerns.

PROFILE OF A NEW KIND OF MANAGER:

(Continued from page 25)

Committee is to build our men.

- Q. How often do these committees meet?
- A. Once a week. Every Monday. The policy group meets first thing in the morning, at eight o'clock. The operating group gets together Monday afternoon.

Do you actually get decisions during these committee meetings?

A. I have my most interesting arguments with people from other companies when they say that a committee never decides anything. I just stand up and tell them they are wrong—that our committees do and they do it all the time. Now, if you want to start to get highly technical, sure you will find that there is some one person who has the authority.

For example, in our Management Committee I have the ultimate authority. But I just don't get up on my feet and use it. Why should I? These other men know more about their phases of the business than I do. They ought to; it's their job, not mine.

- Q. Some people feel that a lot of time is wasted in committee meetings . . .
- A. If you have a good organization, you don't find people wasting time worrying about the limits of their authority, protocol and things like that. The point is that you've got to get people working together. The committee represents teamwork. It's there as a backstop, and for settling disputes and so on.
- Q. Do you usually find that you have a unanimous decision?
- A. No. You often do, but that doesn't mean that you usually do. As a matter of fact, I think this is one of the advantages of this so-called committee approach: we sit down and have some terrific battles.

There is hardly a real vital subject that you don't get battles on. But look at it this way: by one man putting up a strong fight, it makes the other men really stop and think. I change my mind all the time.

There's another thing. When everyone makes himself clear and finally gets what he has to say off his chest, often a guy like Dudley Scholten (vice president sales) will say, "Well, you fellows know how I feel about it, but in the last analysis this should actually be an operating decision." So finally we decide that the operating men should make the decision after all.

Or it might work this way. We'll hear Joe Detweiler (vice president and treasurer) say, "Well, look, I don't agree with this but it's a sales decision and Dudley is the guy who has got to live with it, so let's go ahead and do it his way."

It is damn seldom that I have to use the prerogative of my office and announce that such and such is the way something is going to be done.

Q. Do you find that a cross-current of thinking is the major advantage of the committee approach to making policy decisions?

HOW ARGUS USES OPERATIONS RESEARCH IN MAKE-OR-BUY

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Last year Argus played host to the Systems and Procedures Association during its International Systems Meeting. In their offices and plant, the Argus staff conducted a seminar to show how operations research is used within the company. Following are excerpts from an informal talk by one of the Argus staffers, John Shattuck, production planner and chairman of the Purchase-Make Committee.

Out of an operations research project came our purchase-make procedure: a decision rule. It is the means by which we are guided in deciding whether to make a part ourselves or buy it from outside vendors.

The camera business is seasonal, yet Argus maintains a stable employment level. One of the factors contributing to stability of employment is our use of the purchase-make option. We maintain limited manufacturing capacity, farming out operations at peak sales periods, recalling them at lower periods.

The objective of purchase-make decisions is to maximize profits. We do this through a comparison of costs of both options, thus arriving at a profit advantage for one option over the other. Maximum profit is realized by simply scheduling parts to our facilities in order of profit advantage.

The cost standards assigned have been developed from a direct cost analysis. Operations research was used as the means of reaching these cost standards. To the purchase price is added the other internal and external costs. The direct labor and material costs of making a part bear only the burden that pertains to making the part. This is an important refinement of conventional cost accounting procedures.

The Purchase-Make Committee at Argus consists of seven people. In addition to the chairman, there are representatives from Purchasing, Standards, Quality Control, Engineering, Cost Accounting, and the Mechanical Manufacturing Divisions.

The Planning Department prepares the cost comparisons and distributes them to committee members. Periodically, the-committee meets to review the parts on which a decision is to be made. Typical decisions are these from an actual meeting:

- 20473, Pin. A lower purchase quote cuts profit advantage from plus \$5.05 to plus \$1.94. As this part will be obsolete in the near future we will purchase the remaining quantity needed.
- 20146, Reset Cam Gear. A 65% reduction in minutes for broaching changes profit advantage from minus \$3.57 to plus \$4.03. This part should be made at Argus. Tools are on order.
- 76158, Flash Cap. We compared the complete purchase cost including paint to processing the part at Argus and came out with a minus \$36.43 profit advantage. This will remain a purchased item.

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A. You get the most absolute coordination through the committee approach, of course. In other words, not only are two minds better than one, but the cross-play of two minds is better than a single mind working out a problem. Very often you will find that when something is bothering you and you get a chance to talk to someone about it, even if they don't make a contribution to your problem or solution, the other person helps you clarify your own thinking.

Actually, what you are doing through your Management Committee is to have all of your top men work together to fill the function of general manager of the business.

A. That is absolutely right. And that's what I meant when I said a company like ours can build general managers like no big business can.

The best way I can draw a parallel is to say that we, in a very small way, are like Du Pont. Du Pont is one of the finest run companies in the country.

Now, Du Pont has an executive committee that does nothing but "exec." This committee includes the president and it consists of men who have been very often specialists in specific fields of business. One man has come up through marketing, another through operations. But they no longer have any line responsibility of any kind. Now they have time to think.

Under the Executive Committee, Du Pont has 10 operating departments. The head of each of these departments is like the president in any other large corporation. But from time to time the head of each department goes before the Executive Committee for a review. For example, the head of the Photo Products Department, John Clark, will take along his key people and appear before the committee with all his plans, budgets, accomplishments, and long-range goals. The Executive Committee sits in judgment.

"It's seldom that I must use the prerogatives of my office."



One thing that the committee does is to make thoroughly certain that the Photo Products Department has a real manager heading it—and that the manager has a number two man who is able to step in and take over. Every top manager in Du Pont has got to have a number two man.

The head of the department is often called upon to be away from the office, and someone has to run the department while he is away. It's the acid test.

And not only that, it gives the manager a sense of perspective. He discovers that the company can actually run without him. He gets away and *forgets* the business. I think it is terrific. If there were only some way to do the same thing in a small business like ours, I'd be in favor.

Getting back to Du Pont's Executive Committee, what I am trying to say is that the members have no obligations, nothing to clutter up their minds. They sit in broad perspective judgment of the planning of Du Pont.

Now, bringing that down to Argus, I choose to think that we do about the same thing except that because we are small we can't afford to have our men completely unfettered. Our top managers actually have two jobs. They sit as the Management Committee, functioning together as the general manager of the business, solving all the problems regardless of the area. And they really do—no fooling

about it. These guys run the business. But they also have to run their departments, unfortunately.

Mr. Lewis, you have set up a system of "checks and balances" within your organization. Would you explain this system?

A. This is something you seldom if ever hear anything about. I am a believer in clean organization as a principle. But I am not a slave to it. Certainly, you must have clean lines of authority, but it is surprising how these lines are influenced and shaped by powerful individuals within an organization.

Take government, for example. George Humphrey is the Secretary of the Treasury, but he can go far beyond the normal influence of his office because of the type of man he is and the respect he has won for his ability. The next Secretary of the Treasury may be just a quiet, workmanlike man who has no particular influence whatever.

Apply this to a company and you get the same thing. The chief engineer, for example, may be just a quiet sort of person who works strictly in engineering. But you come into our company and you'll find the chief engineer is the second highest paid man in the organization. His influence goes far beyond engineering.

You'll find one company where



the financial vice president is strictly a financial man, while in another company he is the most influential individual outside of the president.

Whenever I'm talking about checks and balances, what I mean is that you have to know your people. Once you have sound methods and procedures set up, and then once you know you have certain strong people in certain jobs, you are never seriously concerned with what is going on. But before you can have this confidence, you must know your peopleknow their strengths and their weaknesses.

Let me try to give you an example. If such and such a unit in Argus is not doing its job, I know that there is some other person or group that, one way or another, is going to see that the situation is straightened out. Why? Because I know we have the inner strength to correct the situation.

Let's take quality control. In our company, we have a man in this function who is an aggressive guy. I know that I can always depend on him never to drop the ball. Furthermore, I know that if he should get out of line, he is going to be caught, hemmed in or confined by, say, sales, which will trip him up if he goes too far in one direction. And if he goes too far in another direction, engineering will catch him.

That to me is checks and balances.

Q. Do you mean that you have some people strategically placed throughout the organization with this checks and balances idea in mind? Or does it just happen that way?

A. In a sense, I have the thought in mind. It isn't an easy thing to describe. Personalities-the interplay of personalities—and the power of individuals—individuals within their own frameworks and even beyond their own frameworks -these are things you find very

difficult to put into black and white. That's why you never hear anything about it.

Look at it this way. Suppose I had to create a new chief engineer to replace this one we've got who is a top flight guy. Suppose there were a couple of powerful, domineering men in other departments who I felt would make it tough for the man I had as a replacement. That would make such a man a poor bet for the job, and I'd be in error if I didn't give this thought consideration. On the other hand, suppose I had a man who wasn't really a stem winder but I knew that the people in sales, purchasing and so on would operate with this guy. Well, then, that would be an entirely different situation.

My feeling is that an executiveand particularly a chief executive -simply isn't doing his job unless he is thinking of these things all the time. You've just got to know vour people.

Would you say that knowing your people is the top executive's biggest job?

A. In a sense, yes. Mostly what makes a management successful is the climate it is able to develop within its company. This to my way of thinking is the most important function of management. If the people at the operating levels know that you want them to do it, they'll go ahead and develop their abilities to the fullest extent.

For example, in our company specifically, we make certain that no one is held back. We try to encourage our people to take an active part in the crusade-if we can call it that-now underway in the area of modern scientific management. We particularly encourage our people to take part in the programs of the American Management Association and other similar organizations-both as participants and as speakers.

We have found that whether one of our people goes to a conference to listen and learn, or to serve as a speaker, either way it is the same thing. Whenever I am speaking before one of these groups I often tell the people that the reason that I am willing to do it is that it keeps me alive. I get up there before a group and find myself preaching a gospel and I begin to think-Say, this sounds pretty good! As you know, the easiest thing in the world is to get so busy that you forget to do the things you know you should be doing. I go to these things and take part in them and keep repeating the simple truths-because it is the simple things that really cut the mustard. You've got to bang it home-particularly in your own company because that's a big part of the job of providing the right climate for your organization.

> In 1949, Mr. Lewis, Argus was having some troubles and you were called in to take over as chief executive. Would you explain what the problems were at that time and describe some of the specific things you have done since then to strengthen the company?

A. The situation was that Argus had bought a couple of small businesses in Minnesota that were making small appliances like clocks. fans, ballpoint pens and what not. I believe they intended to eventually put photographic equipment in these plants, but they hoped to keep the appliance businesses going as long as sales held up. The fact of the matter was that the bloom was already off the rose. It was several years after the war and the big names had begun to take over the small appliances business. Thus, Argus had a bear by the tail; because this company had no name in that field, it began to lose money.

Q. They lost about a million dollars, didn't they?

A. That's right. It's important to remember, though, that throughout this period the photographic end of the business remained healthy and strong.

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- Q. A bank had put up the capital for the new acquisitions in Minnesota. Didn't the Argus management eventually lose control of the business to this bank?
- A. In a sense they did. There was a proxy fight and an annual meeting that lasted three days and three nights. Finally a group of local people—business leaders—got together and won control.
- **Q.** And that was when you were hired?
- A. That's right.
- Q. In other words, Mr. Lewis, despite the trend of diversification that is taking place today, diversification is not necessarily a panacea for every company . . .
- A. A lot of people have taken a beating from diversification. The most important thing from my point of view is to do a good job with what you've got. Now, at Argus, we have recently been getting diversification within photography itself. We're in the light meter and viewer business, for example. And our connection with Sylvania will give us even greater opportunities for diversification within our field. We hope to eventually cover the waterfront.

But my philosophy has always been this: Whatever you are going to be in, be as big and as important and as effective as the giant. And incidentally, that is the philosophy of Sylvania too, which is another reason why our new connection with them will work well. It's one of the secrets of business that if you are going to try to just mess around with a lot of things and not be effective in any of them, it is going to be a really rough deal for you. No, diversification in itself is certainly no panacea.

Getting back to when you first joined Argus, in 1949 after the change in control, what specific actions did you take to help the company overcome the problems it had experienced?

- A. Actually, what I've tried to do is just these things we've been talking about. That's all. Practically all of the talent was here when I came. We didn't bring in very many people. Joe Detweiler was the only man who came with me from the outside at that time. Both of us were with Sanderson & Porter.
- Q. The people who are now the heads of departments—they were already here, but probably not in positions of such authority, is not right?
- A. That is right. Nobody had any authority under the old regime, because the company wasn't run that way.
- Q. Was it what you would call a one-man management?

A. To a large degree. Authority was never passed along. For example, one of the first big moves we had to make was with regard to the sales manager, who was about to retire. All through his career he had been an outstanding salesman himself but he had not developed a capable man under him to eventually take his place.

What could we do? He hadn't brought a man along to take over the job. It became a question of getting someone from outside, or picking someone inside from some other calling. Dudley Scholten was the secretary of the corporation then, a lawyer by profession. But Dudley knew Argus and we decided we would rather take a gamble to see whether he became a real sales manager, rather than to go out and gamble on getting the right man from the outside. Of course, what has happened is that Dudley has made a terrific sales manager. What he did-and this is something I want to emphasize-is manage the sales department and let the other people be the salesmen. He had all-round ability and enough open-mindedness to find out how to get things done-how to learn his new job and get the greatest amount of support from his men.

Another time we had our factory manager's job to fill. We took our director of industrial relations, who is a young man, and we just plunged him into it. This man, in industrial relations, had been exposed to production problems and he had a natural aptitude for mechanical things—he understood machines. But he had never studied engineering in his life, and never worked in a factory in his life. But he has also done a tremendous job.

I say this: give me the man and you can have the experience. Of course, if you can have both, fine. But if it's a choice between the man and the experience, I'll take the man every time.

Q. ch

What are the major characteristics that you have in mind when you say, "Give me the man and you can have the experience"?

A. That is the 64 dollar question. There have been a lot of surveys and studies on what are the qualities of the top executive, the leader. I agree with most of the ones that you see. You have got to have the Curiosity. usual. Intelligence. Drive is an important thing-the willingness to devote yourself to a job. When Larry Appley (president of American Management Association) and Don Mitchell spoke to our supervisory group here at our plant one night, they both emphasized one thing that I have always emphasized: if a man wants to climb up the ladder he has got to pay for it.

- **Q.** He must want to do that more than anything else?
- A. He has got to travel, for one thing, and that raises havoc with

"Mostly what makes a management successful is the climate you develop."



home life. If a man doesn't really want to do it, he should stay out of that area.

- Q. Do you believe that there is any kind of special management talent? Is it something that you either have or don't have . . .
- A. Oh, it is simply an understanding of people, and how to deal with people Who was it? Charley Schwaab made the statement—or I guess it was Henry Ford who made the statement that the quality for which they would pay the greatest premium is the ability to deal with people.
- **Q.** Well, what is this ability to deal with people?
- A. The only way I can answer that is to say that it is providing the proper climate, getting people to do their jobs, sticking by them, supporting and fighting for them, encouragement, making them do the work.

If I may quote Larry Appley again, one of his gems is his brief definition of management. He says that management is simply a question of getting things done through people. And that is exactly what it is. When you have the ability to get people to do things, then you have the ability to help people broaden themselves.

There are a lot of people, you know, who have abilities and don't realize it. I am a strong believer that you can almost pick people off the streets and find potentials in them that are far and away from anything they believe they possess. Even mediocre people, if you push them into it, can strengthen themselves enough to handle responsibility—provided, of course, that they are given the right procedures and management tools to work with, as well as a sound framework of management policies.

One of the policies that you have put forward at Argus is that a good deal of emphasis should be placed on merchandising, is it not?

- A. I think that is true. Substantial success in merchandising can give you more than the same amount of success in other areas—but you've got to give careful attention to the other areas too. You can have the best mousetrap in the world, but if you don't sell the darn thing it won't get you anywhere. A good product alone doesn't do it.
- Q. Are you thinking now in terms of luxury items, such as your cameras, or of industry as a whole?
- A. Have you ever seen a better example than the automobile industry? The best engineered car isn't necessarily the one that sells the best. To sell a car, you've got to have the right combination of styling and merchandising catch the fancy of the public. The same thinking applies to any other product you might be selling. Of course, another factor that enters in here is distribution. I think that distribution is one of the biggest problems facing American business. A small company has a terrific job of distribution.

How Argus uses statistical sampling in inventory management

Excerpts of remarks by Leslie Schwanbeck, Argus production control manager, before an inventory management seminar of the Methods Engineering Council.

One of the large items of cost in carrying inventory is the annual physical inventory count. At Argus it used to cost us approximately \$15,000 at the end of each fiscal year just to cover the wages of our own people in the taking of physical inventories. This was in addition to our spot inventories throughout the year.

We asked ourselves: What can do we about this?

Last year, during the period when we were taking our annual physical inventory, we decided to try an experiment. We applied the techniques of statistical sampling along side of our regular physical inventory counting. The results proved that sampling can be successfully used in inventory. We found that by using a sampling plan, our inventory would have been off only $1\frac{1}{2}$ %.

After obtaining confirmation from our accounts, we are now able to substitute statistical sampling for our former annual inventory, retaining only our cycle inventory program. This method alone gives us a savings of \$15,000 a year on our physical inventory.



Lewis and Production Manager Brinkerhoff at the Argus production control board.

MANAGEMENT METHODS

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Why is distribution a special problem of the smaller firm?

A. Well, because we have the same problems that the big companies have, but we don't have the kind of volume that helps overcome these problems. In other words, it's largely a question of having enough grist for the mill.

Q. This problem of distribution, then, was probably another key reason why Argus is becoming a part of Sylvania.

A. Yes, Sylvania is in the photography lighting end and they've had the same problems in a sense that we've had: limited volume and specialization in the field. Now, together, we broaden our interest in photography. It is a growth business and, speaking collectively, we expect to do a very worthwhile job.

Q. For example, distribution channels now can be used for double duty . . .

A. Stronger in distribution, advertising, merchandising and everything that goes with it.

Q. Do you mean you will be stronger name-wise?

A. Yes, we will be of greater importance to all of our customers. Sylvania and Argus combined become a substantial factor in photography.

Q. Over-all photography?

A. Yes, our business and theirs put together. Of course we have very broad, long-range plans where we expect to expand what we've got and build into some new areas.

Your company has also been noted for another of its policies—that is, flexibility of organization and operation through a "make-or-buy" arrangement. Would you explain how Argus makes this arrangement work?

A. You have to decide whether it's worth it to be completely inte-

grated-to make everything yourself-have enough equipment and facilities to handle all your top production. At Argus, we don't believe in that. In fact, right now we are having complete finished products made for us on a contract basis -our light meters, for example. There is an area where we don't have any manufacturing equipment, yet we're a primary factor in that field. The product is made to our specifications and quality standards, but we've delegated, so to speak, the manufacturing end. This ties back to what I said just a minute ago: we believe we can do the best job by putting our own emphasis on the merchandising end of the business. Our biggest identity is our name and the merchandising identity in the trade and among the public.

We keep ourselves in the position where we do *not* have enough equipment to make even our key production. So we buy certain things; and we make them—we do both. We are constantly deciding whether it is better to make or buy a certain thing. Again using the

auto industry as a parallel, they follow the same practice. There are many advantages. For one thing, it keeps your competitive position sharp.

Q. Do you have your internal organization submit bids, for example, on a competitive hasis with outside suppliers?

A. Yes, our internal units are competing with our outside suppliers all the time. If we can buy cheaper outside, then the work is done outside.

Q. Did you adapt your policy of make-or-buy from what the automobile industry has been doing?

A. No, we have had no conscious following of the auto industry. Argus was using this practice before I came here. I like it as an idea. There are times, of course, when it would be more advantageous to have more equipment. When everything is going fine and business is terrific it is wonderful to be your own supplier. But the minute you get any kind of a fall-off in the economy or a business

"Once you have certain strong people in certain jobs, you are never seriously concerned . . ."







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"The emphasis should not be on scientific management as such, but on the responsibility of management . . "

reversal—especially in a luxury market like ours—then the make-or-buy policy really pays off. You can pull in your horns—bring in more work from the outside and keep your own people busy. It's the overload that we put out. And I think it really does keep us sharper.

Q. Doesn't the make-or-buy policy also reduce the amount of capital required to operate and expand a business?

A. Yes, it has contributed to the fact that since I have been with Argus we have been able to finance our growth completely out of earnings. We haven't raised any capital at all from any other source.

There are two things involved. One is the actual working capital requirement—for inventory primarily—and the other is the capital cost of plant and equipment we would need if we did not follow our policy of purchase-make.

There is another thing that is a contributing factor here. That's our very successful work in the area of inventory management. Our people have developed an advanced inventory method, based on statistical sampling (see box, page 68). As far as we can determine it is the only system of its kind. This system makes a big difference; without it we would have a lot more money tied up in inventory.

You say that your inventory program is worked out on a basis of statistical sampling, but what kind of a gauge do you use to make your decisions under your make-or-buy program?

A. It's all worked out on a basis of operations research. Our people have gone a long way in the use of operations research as a management tool—a decision-making tool.

Q. Then your operations research

program is handled by your own people, rather than an outside specialist.

A. We had a consulting firm— Methods Engineering Councilcome in at the beginning to go into the whole science with us. They ran an educational program. They taught our people how to use operations research and we have been using it ever since (see box, page 64).

Q. Was it difficult to get this program started? Did it require specially trained people? Did you have to bring in some mathematicians for your staff?

A. No, enough of our people were mathematicians. We have several people who were pretty far along in this area even before we started using operations research. Our director of quality control is quite a mathematician and Jim Thompson, our chief industrial engineer, is a high grade mathematician. Now they are both leaders in the field of operations research. But actually, you don't have to be much of a mathematician to operate in this area once the program is set up. We finally got operations research down to the point where all those who were to be involved had learned enough about it so they completely understood it. Since then it has worked fine.

Summing up, Mr. Lewis, you have been described as a scientific-type manager—what we at "Management Methods" like to term the new kind of manager. We would like to have your statement of what scientific management—as it is being practiced today—really is.

A. The emphasis should not be on scientific management as such, but on the *responsibility* of management—public responsibility and the responsibility for building people. This is a new wrinkle in business caused by the many recent changes in the business world.

Whether it is because of the enlightened attitude of people generally or simply because management has been forced to assume new responsibilities is immaterial. The net result is that the responsibility on the part of management has increased tremendously.

Q. Do you think this change has resulted primarily from the growth in size and complexity of firms?

A. No, because it is clear that the heads of small companies are just as active in this new area of scientific management thinking as are the big companies.

Q. Do you mean, then, that small businesses are following the lead of the bigger concerns?

A. No, I think that the small businesses to some degree have led the parade. For example, going back over a period of years, the heads of the smaller companies were the first to begin accepting their public responsibilities.

I merely mention this to explain this term scientific management. It seems to imply someone handling his business with a slide rule and a computer. Management is a long way from this point. True, we have these scientific tools to work with, but there has got to be something else—another ingredient—that makes the whole thing work.

You can't boil management down to slide rule proportions. It involves a range of other factors, all of which must be involved with the scientific management tools we have come to use today. The most important of these factors is leadership. Scientific management is, to my way of thinking, primarily measured in terms of management leadership. m/m



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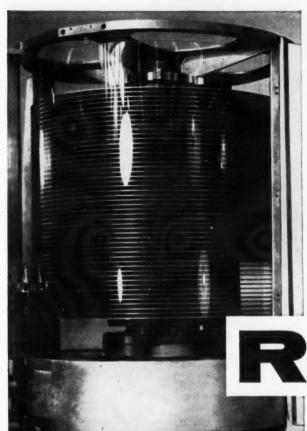
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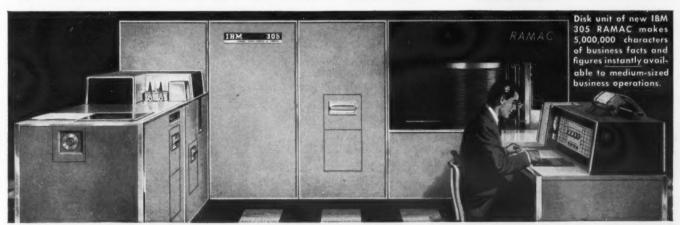
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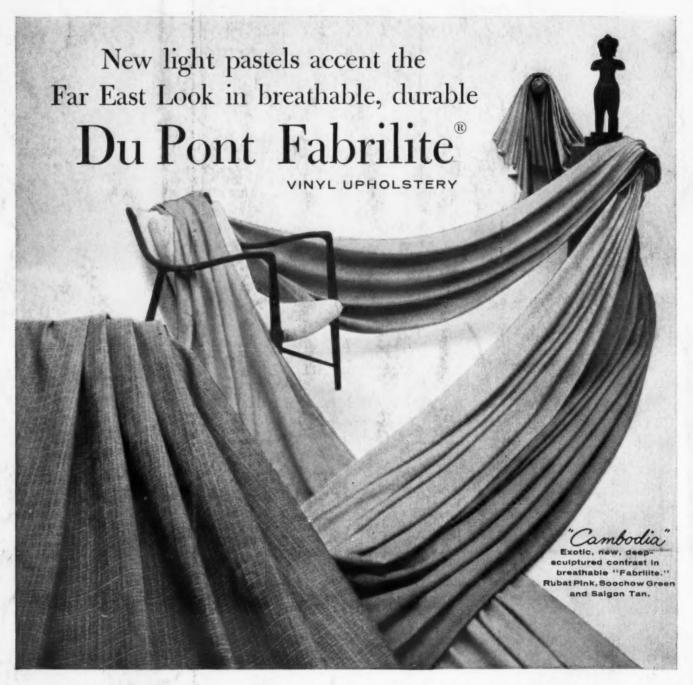
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